Briefing Document For Teacher Quality & Student Learning

Prepared for the Institute for Tomorrow's Workforce August 2006

Contents

Introduction	3
Section 1: Teacher Performance, Compensation, and Career Development	4
Mentoring and Induction	4
Career Paths	7
Professional Development	8
Team-Based Variable Pay	13
Iowa Teaching Standards including evaluation of teachers	14
Section 2: Student Achievement	16
Definitions	16
Federal and State Requirements to Improve Student Achievement	17
Student Achievement Results	26
The Iowa Tests: Iowa Tests of Basic Skills (ITBS) and Iowa Tests of	
Educational Development (ITED)	26
What is Proficient?	
Annual Measurable Objectives/Intermediate Goals for all Grades	28
ACT	35
Correlation of Iowa Tests to ACT	35
National Assessment of Educational Progress (NAEP)	36
Third International Mathematics and Science Study (TIMSS)	43
Section 3: Model Core Curriculum	
Overview	49
Science Core Curriculum Highlights	51
Literacy Core Curriculum Highlights	51
Math Core Curriculum Highlights	51
Next Steps	52
Appendix A: Implementation Details for Teacher Performance,	
Compensation, and Career Development	54

Appendix B: Iowa Teaching Standards and Model Criteria	59
Appendix C: The Iowa Content Networks	62
Appendix D: Grade-Level Indicators Corresponding to the Iowa Tests	
for Grades 3-12	64
Appendix E: Proficiency Descriptors Used in Iowa in Reading,	
Mathematics and Science	78
Appendix F: Sample Model Core Curriculum Lesson	85
Appendix G: The Partnership for 21 st Century Skills	88
Appendix H: Iowa Code Chapter 284	90

Introduction

This paper contains highlights of initiatives in the area of school improvement and quality assurance in the area of education. It presents some of the current and ongoing programs, both federal and state, in place for the 2006-2007 school year. The entries are generally brief and in list form. Sources for additional information have been noted.

The first section of the paper describes the Teacher Quality initiative established by the lowa Legislature in 2001 and specified in Iowa Code Chapter 284 (Appendix H). The Iowa Teacher Quality initiative includes:

- Mentoring and Induction
- Career Paths
- Professional Development
- Team-Based Variable Pay
- Iowa Teaching Standards including evaluation of teachers

The second section of this paper includes efforts related to student achievement in lowa as measured by:

- The Iowa Tests
 - o Iowa Tests of Basic Skills (ITBS)
 - lowa Tests of Educational Development (ITED)
- ACT
- National Assessment of Educational Progress (NAEP)
- Trends in International Mathematics and Science Study (TIMSS)

The final section of the paper addresses efforts to improve student achievement through lowa's Model Core Curriculum.

Page 4

Section 1: Teacher Performance, Compensation, and Career Development

A. Background:

The Iowa Legislature passed Senate File 476 (now Iowa Code Chapter 284; see Appendix H) "Teacher Performance, Compensation, and Career Development" during the 2001 session. Prior to passage of the legislation, at least four different commissions and advisory teams had recommended to Iowa Governors Terry Branstad and Tom Vilsack that investing in teacher quality would have a direct impact on the quality of K12 education. (1997: *The Governor's Commission on Educational Excellence for the 21*st *Century*, Marvin Pomerantz, Chair; 2000: *Iowa Council on Educator Quality*, Thomas J. Switzer, Chair; 2000: *A Plan for Recruiting and Retaining Quality Teachers in Iowa*, Business Forum on Education; 2000: *Iowa Teacher Compensation Design*, John Forsyth, Chair).

(See Appendix A for implementation timeline of teacher quality elements)

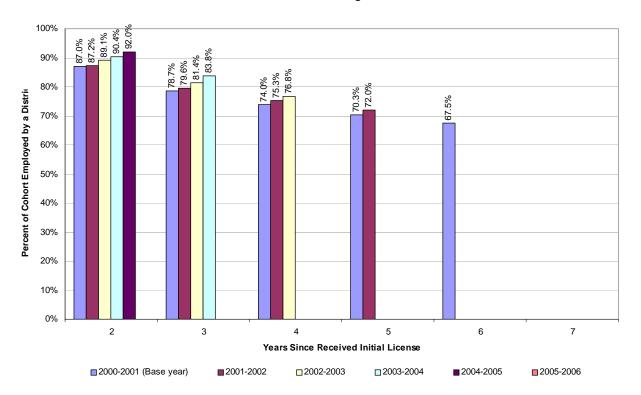
- B. Goals of "Teacher Performance, Compensation, and Career Development" legislation:
 - To create a student achievement and teacher quality program that acknowledges that outstanding teachers are a key component in student success
- C. The compensation strategies are designed to do the following:
 - To attract and retain high performing teachers
 - To reward teachers for improving their skills and knowledge in a manner that translates into better student learning
 - To reward staff of school attendance centers for improvement in student achievement
- D. Four major components of the legislation:
 - 1. Mentoring and induction to support beginning teachers
 - 2. <u>Career paths</u> with compensation levels to strengthen lowa's ability to recruit and retain teachers
 - 3. Professional development designed to directly support best teaching practice
 - 4. <u>Team-based variable pay</u> to provide additional compensation when student achievement improves

Described below are descriptions of the four components as well as results to date:

- 1. Mentoring and Induction:
 - a. Purpose: To attract and retain new teachers
 - b. Components of the program:
 - (1) Establishes that beginning teachers have an initial teaching license
 - (2) Provides a qualified mentor to beginning (first and second year) teachers
 - (3) Establishes that after a two-year mentoring and induction program, the beginning teacher must meet the eight lowa teaching standards through a comprehensive evaluation in order to receive a standard license. A teacher who does not meet the standards may have one more year (third year) to demonstrate competence in the standards; if s/he does not demonstrate competence, the teacher will not be issued a standard license and cannot continue to teach in lowa.

- (4) Requires that a qualified evaluator (individual who has completed evaluator approval training) evaluate the beginning teacher per the lowa teaching standards
- (5) Provides \$1300 per year per beginning (state appropriation) to compensate mentor and to cover expenses
- (6) Requires that mentor teachers have at least four years teaching experience and demonstrated skills in training and coaching
- c. Results to date: (see graph on following page)
 - (1) Retention of first-year teachers in Iowa has increased
 - (a) 2000-01: <u>87%</u> retention rate (b) 2005-06: <u>92%</u> retention rate
 - (2) Retention of second-year teachers in Iowa has increased
 - (a) 2000-01: <u>78.7%</u> retention rate (b) 2005-06: <u>83.1%</u> retention rate

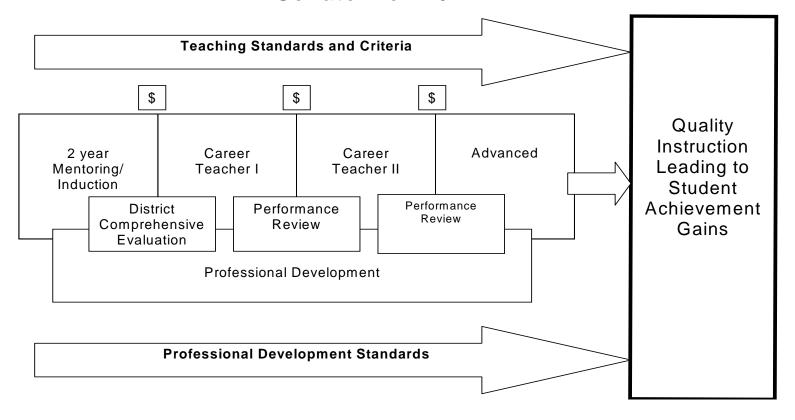
Percent of Teachers Employed During Each of the First Five Years after Receiving Initial License



2. Career paths:

- a. <u>Purpose</u>: reward teachers for improving their skills and knowledge in a manner that translates into better student learning
- b. Components of the program:
 - (1) Iowa Code Chapter 284 established four compensation levels for teachers
 - (a) Beginning
 - 1) Holds an initial teacher license
 - 2) Participates in 2 years of mentoring and induction
 - 3) District's minimum salary for a first-year beginning teacher shall increase by at least \$1500 per year above the minimum salary paid to a first-year beginning teacher (unless minimum beginning salary is \$28,000)
 - (b) Career I Teacher
 - 1) Has successfully completed mentoring and induction
 - 2) Successfully completed a comprehensive evaluation
 - 3) Holds a standard teacher license
 - 4) Participates in professional development
 - 5) Legislative intent: Provides that a Career I Teacher receive at least \$2000 difference above the minimum beginning teacher salary (unless minimum Career I Teacher salary is \$30,000)
 - (c) Career II Teacher
 - 1) Meets all requirements of Career I Teacher
 - 2) Has been evaluated by the district and demonstrates competencies of a Career II Teacher
 - 3) Legislative intent: Establishes that district adopt a plan to facilitate transition of Career I Teacher to Career II Teacher level
 - 4) Legislative intent: Provides that a Career II Teacher receive at least \$5000 above the minimum Career I Teacher salary
 - (d) Advanced
 - 1) Holds valid standard license
 - 2) Receives recommendation of a review panel for Advanced level (demonstrates superior teaching skills)
 - 3) Participates in professional development and demonstrates continuous improvement in teaching
 - 4) Possesses the skills and qualifications to assume leadership roles
 - 5) Legislative intent: Provides that an Advanced Teacher receive at least \$13,500 above the minimum Career I Teacher salary
 - (2) Chapter 284 also established
 - (a) Teacher may be promoted one level at a time and shall remain at that level for at least one year before promotion to next career level
 - (b) Regular performance review must demonstrate teacher qualified to remain at career level
- c. Results to date:
 - (1) Beginning level implemented
 - (2) Career I Teacher implemented
 - (3) Funding has not been adequate to implement either Career II Teacher or Advanced Teacher levels

Student Achievement and Teacher Quality Program Senate file 476



- 3. Professional Development (Teacher Career Development)
 - a. <u>Purpose:</u> to directly support best teaching practice through implementation of research-based strategies
 - b. Components of the program:
 - (1) District career development plan (focuses on all teachers in the district)
 - a) Requires that district career development plan be incorporated into the district's comprehensive school improvement plan (CSIP)
 - b) Aligns with 8 Iowa Teaching Standards (see Appendix B)
 - c) Utilizes research-based instructional strategies
 - d) Focuses on long-range student learning goals
 - e) Implements best practice of professional development including
 - 1) Analysis of student achievement data to determine needed focus professional development
 - 2) Theory

- 3) Classroom demonstration and practice
- 4) Observation and reflection
- 5) Teacher collaboration and study of implementation
- 6) Integration of instructional technology, if applicable
- 7) Evaluation of instructional practice and student learning
- (2) Individual career development plan (focuses on individual teacher areas of growth)
 - (a) Dovetails with district career development plan
 - (b) Developed in cooperation with the teacher's evaluator (annual meeting of evaluator and teacher to review/refine plan)
 - (c) Aligns with 8 Iowa Teaching Standards (see Appendix B)



- (3) Content Networks (assists districts in selecting professional development with proven results):
 - (a) Web-based resource (http://www.state.ia.us/educate/ecese/tqt/tc/prodev/main.html)
 - (b) Provides overview of research-based strategies in math, science and reading
 - (c) Establishes a continuum of quality research (see graphic below as well as Appendix C for more details)
 - 1)Gold standard
 - 2) Strong evidence
 - 3)Promising
 - 4)Marginal
 - 5)No empirical evidence
 - (d) Gives local districts current information on "what works"
 - (e) Taps into expertise of educators from universities, AEAs, school districts and the Iowa Department of Education to review research studies
 - (f) Continuously updated with most current research



c. Results to date:

- (1) Number of teacher contract days dedicated to professional development has increased
 - (a) 2002-01: median of 4 days
 - (b) 2005-2006: median of 7 days (lowa Legislature provided funding for one day beginning with 05-06 school year)
- (2) District career/professional development more focused on "needs" (What does student achievement data indicate are areas of needed focus?) Districts may have chosen more than one area.
 - (a) 302 districts focused on reading
 - (b) 185 districts focused on math
 - (c) 105 districts focused on science
 - (d) 159 districts focused on "other" (e.g. writing, technology, classroom management, differentiated learning)
- (3) Professional Development "networks" implemented (partnership between lowa Department of Education and the AEAs)
 - (a) Best practices in professional development
 - (b) Every Child Reads (reading) including adolescent literacy
 - (c) Every Student Counts (math)
 - (d) Every Learner Inquires (science)
 - (e) Teacher Development Academies to focus on specific research-based strategies, especially for middle and high school level teachers

4. Team-based variable pay

- a. <u>Purpose:</u> to provide additional compensation when student achievement improves
- b. Components of the program:
 - (1) Designed to reward staff of a school/attendance center for improvement in student achievement
 - (2) Established as a pilot program
 - (3) Required school building teams to
 - a) Set achievement goals (local school board approval also needed)
 - b) Select valid and reliable assessment measures
 - c) Determine which staff in the building receive awards if goals are met

c. Results to date:

- (1) Pilot schools and results:
 - (a) 2001-02: 18 schools participated: 9 received awards (met their goals)
 - (b) 2003-04: 10 schools participated; 7 received awards (met their goals)
 - (c) 2004-05: 9 schools participated; 2 received awards (met their goals)

Year	Study	Reading	Math
2001-02	Pre/post tests	+ change (most grades)	+ change (most grades)
03-04	Matched schools	+ change but insignificant	+ change and significant
04-05	Matched schools	+ change but insignificant	+ change but insignificant

(2)Three studies have been completed on the three-year lowa TBVP pilot including Binder (2005), Boring (2006), and the three-year lowa study completed by the Department of Education. Only two schools participated for all three years. Findings included:

- (a) No significant relationship between TBVP and student achievement in reading or mathematics was found.
- (b) A positive and significant relationship between goal rigor and student achievement was found regardless of participation in TBVP (Boring, 2006).
- (c)Teachers want to be seen as professionals who do not require financial incentive to increase their effort (Chadwick, 2005)

lowa Code Chapter 284 also established the eight lowa Teaching Standards (see Appendix B) and a process by which beginning and career teachers are evaluated.

Components:

- 8 Iowa Teaching Standards are aligned with the Interstate New Teacher Assessment and Support Consortium standards (INTASC standards) as well as the National Board for Professional Teaching Standards (NBPTS) as well as research on effective teaching
- 8 Teaching Standards form the basis for evaluation of beginning and career teachers
- Beginning teachers must be evaluated on 8 Iowa Teaching Standards prior to receiving standard license
- Career teachers must be evaluated every three years according to the 8 lowa Teaching Standards
- Administrators who evaluate teachers are required to successfully complete lowa Evaluator Approval Training Program (IEATP)
- > IEATP develops four skills in administrators/evaluators
 - Knowledge of 8 Iowa Teaching Standards

- Data collection and management skills
 Feedback and conferencing skills with teachers
 Data-informed decision making

Section 2: Student Achievement

Definitions

Content Standards Content standards are statements that describe in rather general

terms, what students in grades K-12 should know and be able to do as a result of their school learning experience. The Iowa Core Content Standards and Benchmarks can be found in Appendix B of

this document.

Benchmarks/Grade level indicators

Annual Measurable

Objective (AMO)

Benchmarks are statements of knowledge and/or skill. Broad content standards are translated into more detailed statements, called benchmarks, which describe, a content standard at a given

developmental level (e.g., 4th grade). See Appendix D

Performance Standards Performance standards answer the questions: "How good is good

enough? What does it look like when a student's work has met the expectations at this grade level?" Performance standards may also be referred to as expectations or indicators. See Appendix E for

the Core Performance Indicators expected from Iowa students.

Proficiency Descriptors Proficiency descriptors define what is meant when it is stated that a

student has performed at a particular achievement level such as the "proficient" or the "advanced" level. Proficiency descriptors describe levels of achievement in key areas of learning. "Cut scores" are established on a state assessment to determine if a

student is proficient on the test. See Appendix E.

Teaching Standards Teaching standards are statements of teacher knowledge and

skills. The Iowa Teaching Standards and Model Criteria were

adopted in 2002. See Appendix B.

School Standards School standards refer to standards by which schools are

approved to operate. Iowa Administrative Code Chapter 12 gives rule interpretation regulatory guidance for the accreditation standards for school districts and accredited nonpublic school.

State Indicators State indicators are specified in Iowa Administrative Code Chapter

12. Districts and non-public schools report these annually to the public. One example of a state indicator is the percentage of all fourth graders who achieve proficiency or higher in reading.

Annual Measurable Objectives are required as part of NCLB. AMOs are the intermediate goals each state established for grades 3-8 and 11 in reading and math. These goals represent the percent

of students who should be proficient each year (starting point 2001-02 and ending point 2013-14.) No Child Left Behind

established that each state must determine a targeted path under which schools must have 100% of students to the proficient level in

reading and mathematics.

Federal and State Requirements to Improve Student Achievement

Date of	Federal	Description
Implementation 1985	or State State	Accreditation, a process to ensure that Iowa public school districts and nonpublic schools comply with the school standards, began with legislation enacted in 1985 and 1987. "General Accreditation Standards" followed in 1988.
1987	State	Educational Excellence Act enacted. Three phases: I. Raise starting salary for teachers to \$18,000 II. Increase salaries of experienced teachers. III. Supplemental pay for addition work or training or meeting performance goals. Phases I and II continue today.
1994	Federal	Elementary and Secondary Education Act (ESEA) of 1994 passed. In 1994, ESEA established content and performance standards for reading and mathematics. Through the 1994 legislation, Iowa negotiated the "Iowa Model" with the United States Department of Education. The "Iowa Model" is the alignment of state policy with 1994 ESEA and is now part of Division VIII, Iowa Administrative Code Chapter 12. Division VIII guides the accreditation of Iowa schools and school districts. This is the policy that also created the comprehensive school improvement plan (CSIP), assessment of all students aligned with standards, and the annual reporting requirements (APR).
1999	State	District annual improvement goals required. Chapter 12 revised to state that "The board, with input from its school improvement advisory committee, shall adopt annual improvement goals based on data from at least one district wide assessment. The goals shall describe desired annual increase in the curriculum areas of, but not limited to, mathematics, reading, and science achievement for all students, for particular subgroups of students, or both."
1999	State	District content standards and benchmarks required. "The (school district) board shall adopt clear, rigorous, and challenging content standards and benchmarks in reading, mathematics, and science to guide the learning of students from the date of school entrance until high school graduation. Standards and benchmarks may be adopted for other curriculum areas defined in lowa Administrative Code Chapter 12, Division V. The comprehensive school improvement plan submitted to the department shall contain, at a minimum, content standards for reading, mathematics, and science." A copy of Chapter 12 "General Accreditation Standards" can be found at: <a chapter%202%20general%20accreditation%20iowa"="" href="http://www.state.ia.us/educate/legis/iac28112.pdf#search=">http://www.state.ia.us/educate/legis/iac28112.pdf#search="chapter%202%20general%20accreditation%20iowa"
2000	State	Annual Progress Reports required from every public and

Date of	Federal	Description
Implementation	or State	Description
		accredited nonpublic school district including assessment data and documentation of progress in meeting district goals. According to the state indicators a district must report reading and mathematics achievement at grades 4, 8, and 11 and science achievement at grades 8 and 11. At least one of the measures that could be used by a school district must allow for comparison between students across the state and in the nation. The district must also be able to report the data for the state indicators in grades 4, 8, and 11 by performance or achievement levels and must be able to disaggregate according to subgroups. Any measure that a district uses to establish and measure progress on annual improvement goals must be valid and reliable, have at least three performance or achievement levels and must be disaggregated. A district decides at what grade levels annual improvement goals will be established; but there must be goals for reading, mathematics, and science. The district decides what measures to administer and when specific areas will be assessed for Early Intervention.
2001	State	The lowa Collaborative Assessment Modules (ICAM), standalone assessments that can be used to meet state requirements for multiple measures, developed. Each module was been designed to align with a content standard in either mathematics or reading. Districts independently determine which assessment module(s) they will administer as part of their district-wide assessment system. See: http://www.iowaaea.org/icam/welcome.html .
		Prior to facilitating the development of ICAM, Kris Waltman, now Associate Director for the Center for Evaluation and Assessment at the University of Iowa, completed a study of the content standards across the state of Iowa. She found that even though the content standards in reading, mathematics, and science were developed locally there were many more similarities than differences across the districts. This is in part due to the use by districts of standards from national organizations such the National Council of Teachers of English/International Reading Association, National Science Teachers' Association, and the National Council of Teachers of Mathematics. Also, many districts received guidance in setting their standards from the North Central Regional Educational Laboratory (NCREL).
2001	State	In July 2001 the State Board committed itself and the Department of Education to a serious study of Iowa high schools with a goal of developing specific recommendations. The report is structured around five critical characteristics for effective high schools that are based in the literature review and supported by the community conversations and the review of promising practices. Additional information at:

Date of Implementation	Federal or State	Description
		http://www.iowa.gov/educate/ecese/hsbf/documents.html
2001	State	AP online academy (http://www.iowaapacademy.org/) provides access to online AP courses for Iowa's high school students.
2001	State	 Iowa Code Chapter 284 titled "Teacher Performance, Compensation, and Career Development" was passed by the Iowa legislature to establish a student achievement and teacher quality program for the purpose of promoting high student achievement. The program as designed consisted of five major elements: A mentoring and induction program to provide support for beginning teachers. Career paths with compensation levels that strengthen lowa's ability to recruit and retain teachers. Professional development designed to directly support best teaching practices. Team-based variable pay that provides additional compensation when student performance improves. Evaluation of teachers against the lowa teaching standards. Additional detail in this document, please see "Teacher Quality Legislation, Appendix H"
2002	Federal	The No Child Left Behind Act (NCLB) signed by President Bush. See: http://www.nclb.gov .
2002	Federal	Consolidated application for No Child Left Behind submitted (June 12, 2002 submission). This application included NCLB goals and indicators, state activities planned, and key programmatic and fiscal information. Part I - Goals and Indicators Part II - State Activities to Implement NCLB Timeline for Reading and Mathematics Standards Timeline for Development of Assessments Academic Achievement Standards Single Accountability system English Language Learners Standard Process for awarding competitive sub-grants Title I, Part B (Even Start) Title I Part F (Comprehensive School Reform) Title II, Part A Teacher and Principal Training Subpart 3 Title II Part D (Enhancing Education Through Technology) Title IV Part A, Section 4112 (Safe and Drug Free Schools and Communities) Title IV Part A, Subpart 2, Section 4126 (Community Service) Title IV Part B (21st Century Learning Centers) Monitor and Provide Staff Development to LEAs Statewide System for support of Student Achievement

Date of	Federal	Description
Implementation	or State	·
		Title I Schoolwide
		Coordination with Governor's Office
		Data Utilization to Determine Progress
		Part III - Key Programmatic and Fiscal Information
		Title I, Part A Improving Basic Programs
		Title I, Part B, Subpart 3 – Even Start Family Literacy
		Title I, Subpart C – Education of Migrant Children
		Title I, Part D – Children and Youth Neglected and
		Delinquent
		Title I, Part F – Comprehensive School Reform
		Title II, Part A – Teacher and Principal Training and
		Recruiting Fund
		Title II, Part D – Enhancing Education through
		Technology
		Title III, Part A – English Language Acquisition and
		Language Enhancement
		Title IV, Part A – Safe and Drug-Free Schools and
		Communities
		Title IV, Part A, Subpart 1, Section 4112(a) – Safe and
		Drug Free Schools
		Title IV, Part A, Subpart 2, Section 4126 – Community
		Service for Suspended and Expelled Students
		Title IV, Part B – 21 st Century Community Learning
		Centers
		Title V, Part A – Innovative Programs
		Title VI, Part A, Subpart 1, Section 6111 – State
		Assessment Formula Grants
		Title VI, Part B, Subpart 2 – Rural and Low-Income
		School Program
		GEPA
		Unsafe School Choice Options
		General Cross Cutting Assurances
		Full text is available at:
		http://www.state.ia.us/educate/ecese/nclb/doc/consapp.doc.
2002	Federal	First standards and assessment peer review process
		completed by the U.S. Department of Education under Title I
		to review Iowa's accountability system including standards,
		goals, indicators, and assessments. Iowa assessment
		process approved by the U.S. Department of Education
		(approval required)
2002	State	Technical Adequacy of Assessments Training (ITAP) to train
2002	Ciaic	teams of educators in Iowa public (and private) school
		districts to identify, understand, and use criteria that lead to
		technically adequate, data-based information and decisions
		using their standards-referenced assessment systems.
2002	Federal	
2003	redelal	First State Report Card for No Child Left Behind submitted. It can be found at:
		http://www.state.ia.us/educate/ecese/nclb/doc/reportcard03.p

Date of	Federal	D
Implementation	or State	Description
		<u>df</u> .
2003	State	Reading, Mathematics, and Science Proficiency Descriptors for the Iowa Tests for reading, mathematics, and science were established using a benchmarking approach (http://www.state.ia.us/educate/ecese/nclb/doc/rmspdit.doc). Core content standards and benchmarks corresponding to the Iowa Tests for reading, mathematics, and science are also available: http://www.state.ia.us/educate/ecese/nclb/doc/ccsb.doc . As are grade level indicators for the Iowa tests for grades 3 through 12 (Appendix D): http://www.state.ia.us/educate/ecese/nclb/doc/gleit.doc . Performance level descriptors are also available (Appendix E).
2003	Federal	Iowa's Consolidated State Application: Accountability Workbook submitted. This is a workbook submitted to the U. S. Department of Education regarding lowa's implementation of the critical elements required for approval of our State accountability systems. Iowa met the required elements including all ten principles: Principle 1: All Schools Accountability system includes all schools and districts in and holds all schools to the same criteria. Accountability system incorporates the academic achievement standards, provides information in a timely manner, includes report cards, and includes rewards and sanctions. Principle 2: All Students The accountability system includes all students including mobile students. Principle 3: Method of AYP Determinations Accountability system expects all student subgroups, public schools, and LEAs to reach proficiency by 2013-14. Accountability system has a method for determining whether student subgroups, public schools, and LEAs made adequate yearly progress. Accountability system establishes a starting point, statewide annual measurable objectives, and intermediate goals. Principle 4: Annual Decisions The accountability system determines annually the progress of schools and districts. Principle 5: Subgroup Accountability The accountability system includes all the required student subgroups and holds schools and LEAs accountable for the progress of student subgroups. The accountability system includes students with disabilities and limited English proficient students. The State has strategies to protect the privacy of

Date of Implementation	Federal or State	Description
implementation	OI State	individual students in reporting achievement results and in determining whether schools and LEAs are making adequate yearly progress on the basis of disaggregated subgroups. Principle 6: Based on Academic Assessments Accountability system is based primarily on academic assessments. Principle 7: Additional Indicators Accountability system includes graduation rate for high schools. Accountability system includes an additional academic indicator for elementary and middle schools, average daily attendance. Additional indicators are valid and reliable. Principle 8: Separate Decisions for Reading/Language Arts and Mathematics Accountability system holds students, schools and districts separately accountable for reading/language arts and mathematics. Principle 9: System Validity and Reliability Accountability system produces valid and reliable decisions. Principle 10: Participation Rate Accountability system has a means for calculating the rate of participation in the statewide assessment and a means for applying the 95% assessment criteria to student subgroups and small schools. Full text is available at: http://www.state.ia.us/educate/ecese/nclb/doc/csaaw04_0509 23.doc lowa's plan accepted by U.S. Department of Education.
2003	Federal	Consolidated State Application completed (May 1, 2003 submission). This submission included state indicators and state performance targets. Baseline data and performance targets for the following AYP-related indicators. Performance Goal 1: By 2013-2014, all students will reach high standards, at a minimum by attaining proficiency or better in reading/language arts and mathematics. Performance indicator: The percentage of students, in the aggregate and for each subgroup, who are at or above the proficient level in reading/language arts and in mathematics on the State's assessment, consistent with the State's annual measurable objectives. Performance indicator: The percentage of Title I schools that make adequate yearly progress. Performance Goal 2:_ All limited English proficient students will become proficient in English and reach high academic standards, at a minimum attaining proficiency

Date of	Federal	Description
Implementation	or State	or better in reading/language arts and mathematics. Performance indicator: The percentage of limited English proficient students who are at or above the proficient level in reading/language arts on the State's assessment, as reported for performance indicator 1.1. Performance indicator: The percentage of limited English proficient students who are at or above the proficient level in mathematics on the State's assessment, as reported for performance indicator 1.2. Baseline data and performance targets for any State identified goals and indicators were included. Evidence was also incorporated indicating that the State has: -adopted challenging content standards in reading/language arts and mathematics at each grade level for grades 3 through 8disseminated grade-level expectations for reading/language arts and mathematics for grades 3 through 8 to LEAs and schools. Full text is available at: http://www.state.ia.us/educate/ecese/nclb/doc/csa030501.doc lowa's plan approved by U.S. Department of Education (approval required).
2003	Federal	Consolidated State Application completed (September 1, 2003 submission). This document includes baseline data and performance targets for state goals and indicators including: Performance Goal 2: All limited English proficient students will become proficient in English and reach high academic standards, at a minimum attaining proficiency or better in reading/language arts and mathematics. Performance indicator: The percentage of limited English proficient students, determined by cohort, who have attained English proficiency by the end of the school year. Performance goal 3: By 2005-2006, all students will be taught by highly qualified teachers. Performance indicator: The percentage of classes being taught by "highly qualified" teachers. Performance indicator: The percentage of teachers receiving high-quality professional development. Performance indicator: The percentage of paraprofessionals (excluding those with sole duties as translators and parental involvement assistants) who are qualified. Performance goal 4: All students will be educated in learning environments that are safe, drug free, and conducive to learning. Performance indicator: The number of persistently dangerous schools. Performance Goal 5: All students will graduate from high school.

Page 24

Date of	Federal	Description
Implementation	or State	·
		Performance indicator: The percentage of students who graduate from high school each year with a regular diploma.
		Performance indicator: The percentage of students who drop out of school.
		Full text is available at:
		http://www.state.ia.us/educate/ecese/nclb/doc/csa030901.doc
		Iowa's plan approved by U.S. Department of Education (approval required).
2003	State	lowa Board of Education sets a goal of a 95% graduation rate for lowa schools by 2013-2014. The lowa public high school graduation rate for 2005 was 90.7% (33,457 students).
2004	State	State Board establishes a priority of high school reform.
2004	State	First annual High Schools Summit held to ensure that graduates have the advanced skills necessary to succeed in an international marketplace. Streaming video from the summit is at:
		http://www.iptv.org/highschool_summit_2004.cfm.
2004	State	Professional development in research-based reading and mathematics strategies provided on a statewide basis: Every Child Reads, Every Student Counts (2004), Every Learner Inquires (2006) and Teacher Academies (2005). More information on Every Child Reads can be found at: http://www.state.ia.us/educate/ecese/cfcs/ecr/index.html.
2005	State	Comprehensive School Improvement Plans required from each district revised. Now based around four "constant conversation questions": 1. What do data tell us about our student learning needs? 2. What do/will we do to meet student learning needs? 3. How do/will we know that student learning has changed (student data)? 4. How will we evaluate our programs and services to ensure improved student learning (implementation data)? Additional information and district plans available at: http://www.state.ia.us/educate/ecese/asis/csi/index.html .
2005	Federal	Buros Institute completes a required validation and alignment study of the lowa tests in reading and mathematics (grades 4, 8, and 11) and science (grades 5, 8, and 11). Additional information on the Buros Institute can be found at: http://www.unl.edu/buros/ .
2005	State	The Department encourages districts to adopt policies regarding their testing program so that it is clear to the school community which assessment procedures the district deems acceptable. Iowa Department of Education and the Iowa Testing Programs published documents to assist districts and schools in establishing administrative rules and procedures for test use, test preparation, test administration, and test

Date of Implementation	Federal or State	Description
		security as well as in establishing board-adopted policies in these same areas. Guidance available at: http://www.state.ia.us/educate/ecese/nclb/doc/cover.html and http://www.state.ia.us/educate/ecese/nclb/doc/sample.html
2005	Federal	Interpretive leaflets for each of the required grades (3-8 and 11) developed and available for use by districts in reporting individual results from the Iowa Test of Basic Skills (ITBS) and Iowa Test of Educational Development (ITED) in reading and mathematics at the following web site: http://www.state.ia.us/educate/ecese/nclb/documents.html .
2006	State	DE project to identify the core content and skills of a world- class curriculum in literacy, math, and science and distribute to districts for their local establishment of a core curriculum. Included in 2006 legislation SF 245. Additional detail in this document, please see "Model Core Curriculum" (see Section 3 and Appendix F)
2006	Federal	Buros Institute completes a required validation and alignment study of the lowa tests in reading and mathematics for grades 3, 5, 6, 7, 9, and 10.
2006	Federal	Second required standards and assessment peer review process completed by the U.S. Department of Education under Title I to determine that Iowa's assessment system produces valid and reliable results.
Scheduled for fall of 2006	State	Planning tools distributed to districts to help districts implement high school and career planning for students in grades 8-12.

Student Achievement Results

A. The Iowa Tests: Iowa Tests of Basic Skills (ITBS) and Iowa Tests of Educational Development (ITED)

The lowa Tests are a set of standardized tests given annually to lowa school students, both in the public and private education sectors, and in many other states. The lowa Test of Basic Skills (ITBS) cover a range of grades beginning in kindergarten and progressing until grade 8 to assess educational development. In grades 9 through 12, the students are examined using the lowa Tests of Educational Development (ITED) program.

The lowa Tests were designed by the University of Iowa's College of Education, as part of a program to develop a series of nationally accepted standardized achievement tests. The assessments cover numerous areas of educational knowledge including reading, mathematics, English language use, social science, and science. The tests have been an integral part of the research program in educational measurement at The University of Iowa for the past 70 years.

- 1931 The Iowa Every-Pupil Tests for high school students were developed at the University of Iowa.
- 1935 The Iowa Every-Pupil Tests were extended downward to the elementary grades; these batteries were renamed ITBS in 1955.
- 1952 The lowa testing programs originated the reporting of test results to elementary school students and parents.
- 1954 University of Iowa developed the first electronic scoring machine.
- 1962 The lowa programs were the first to make frequency distributions and percentiles available.

When the lowa Tests are designed, many things are considered including the recommendations made by national curriculum organizations, such as the National Council of Teachers of Mathematics, the National Association of Science Teachers, and the National Council of Teachers of English, regarding appropriate content, methods of instruction, and assessment in each curricular area. The curriculum guides prepared by states and school districts, including some in Iowa, are also reviewed to determine the content and skills that are considered important outcomes at particular grade levels. Once test items are drafted, the assessments are tried out with students in several grades in many of the schools of Iowa as well as some in the nation. Test questions that seem appropriate for a grade level and that demonstrate growth from grade to grade become candidates for the final test forms.

The lowa Tests are national tests used in districts across the country. The assessments have a broad content based on curriculum in schools across the nation and not just in lowa. The lowa Tests have been normed with a national sample as well as with lowa data. This allows the tests to provide National Percentile Ranks and lowa Percentile Ranks for individuals and schools. School districts can measure themselves against other schools in the nation as well as other lowa districts.

Furthermore, the Iowa Tests are vertically scaled. A vertical scale is an equal-interval scale that spans all grades from kindergarten through Grade 12. Vertical scales are also referred to as "developmental scales." A vertical scale can provide a common

vocabulary and metric for describing a student's progress throughout his or her educational journey. Because the lowa Tests have a longevity record in lowa schools (approximately 70 years) and because they are vertically scaled, they are appropriate to use for a growth model as well as the status model currently used for NCLB accountability.

The U.S. Department of Education approved lowa's use of the lowa Tests to meet the requirements of NCLB accountability and reporting. For purposes of the NCLB accountability, all public schools and districts in lowa are evaluated by performance and improvement on the lowa Tests of Basic Skills (ITBS) and the lowa Tests of Educational Development (ITED). Since 2003, the accountability system has been applied to the percentage of all students and subgroups in grades 4, 8, and 11 achieving proficient level in reading and mathematics. All public schools and districts were required to administer tests in the additional grades (3, 5, 6 and 7) starting in 2005-2006.

The biennium summaries of Iowa statewide achievement data describe student performance in reading and mathematics on the Iowa Tests of Basic Skills (ITBS) and the Iowa Tests of Educational Development (ITED). The purpose of the summaries is to use scores from two consecutive school years to describe annual achievement changes. Until the mid 1990's, statewide achievement data from the ITBS and ITED were shown as average scores for each of grades 3-12 in The Annual Condition of Education Report. Beginning in the 1996-1997 school year, achievement levels were used to report system and building results to each school district in Iowa. These achievement levels also have been made available to describe Iowa statewide achievement trends in The Annual Condition of Education Report. One advantage of using achievement levels instead of only average scores is that achievement levels permit the user to view a broad range of student performance rather than simply seeing how the average student in each grade scored. That is, with achievement levels, the performance of high achieving and low achieving groups of students can be tracked over time; the use of average scores alone only permits the tracking of the average student.

What is Proficient?

With the enactment of NCLB, states were required to define proficient results on their statewide tests used for accountability purposes. This produced a variety of definitions throughout the fifty states. Comparisons of assessments were confounded by the different definitions. Proficient on the Iowa Tests is defined as performance at the 41st percentile or greater as determined by the 2000 Iowa Test national norms. The cutoff scale scores corresponding to the 41st percentile for grades 4, 8, and 11 are shown in the following table. This proficiency level was established to correspond with the Basic level on the National Assessment of Educational Progress. A diverse stakeholder group, as required by the U.S. Department of Education, affirmed the process used to determine the "cut score".

Scale Score Equivalents (National Student Norms 2000) Corresponding to the 41st Percentile on the ITBS/ITED

In Reading:

Grade	Fall	Midyear	Spring	
4	186	190	194	
8	233	236	239	
11	259	262	263	

In Mathematics:

Grade	Fall	Midyear	Spring
4	187	191	196
8	233	237	240
11	259	262	263

Grade Equivalent Cutoff Scores Corresponding to the 41st Percentile on the ITBS/ITED

In Reading:

Grade	Fall	Midyear	Spring	
4	3.8	4.1	4.3	
8	7.3	7.5	7.8	
11	9.7	10.0	10.2	

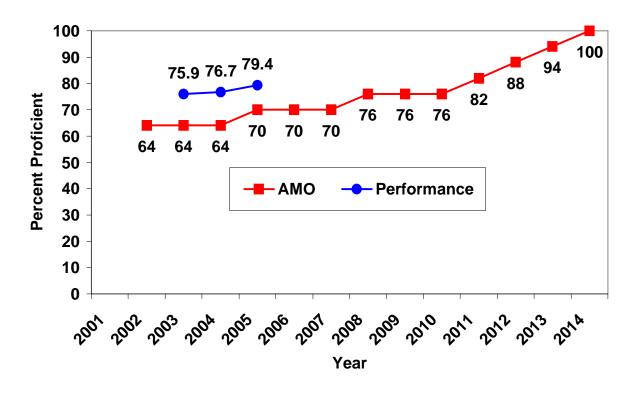
In Mathematics:

Grade	Fall	Midyear	Spring
4	3.9	4.1	4.5
8	7.3	7.6	7.8
11	9.7	10.0	10.1

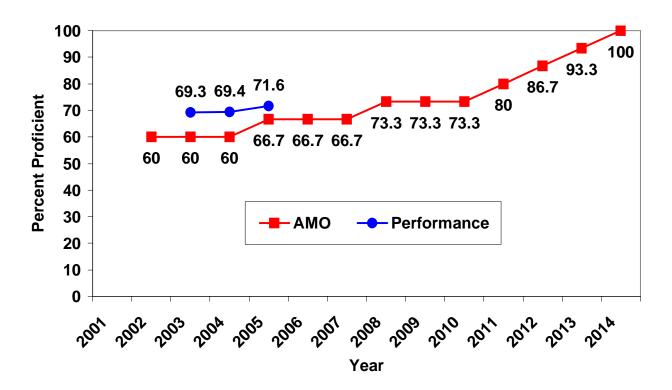
Annual Measurable Objectives/Intermediate Goals for All Grades

Adequate Yearly Progress (AYP) is the No Child Left Behind provision that established a timeline under which schools must raise all students to the proficient level in reading and mathematics within 12 years. This proficiency is established through scores obtained on a common assessment determined by each state. In lowa this proficiency is determined through student achievement data from ITBS and ITED and the alternate assessment for students with significant disabilities. A state starting point for reading and mathematics at each required grade level to be tested was established per requirements of NCLB using 2000-2001 and 2001-2002 achievement data. A formula to reach 100% proficiency by 2014 was also established by the state. Using biennium data, each school and district must meet an annual measurable objective (AMO). The annual goals for Reading and Math, Grades 4, 8, and 11, are shown in the graphs below. Also included on the graphs are the actual results for grades 4, 8, and 11 in reading and mathematics from the most recent school years. All included grades, 3-8 and 11, have similar AMOs set for reading and for mathematics. A chart showing the AMO for each subject and grade follows.

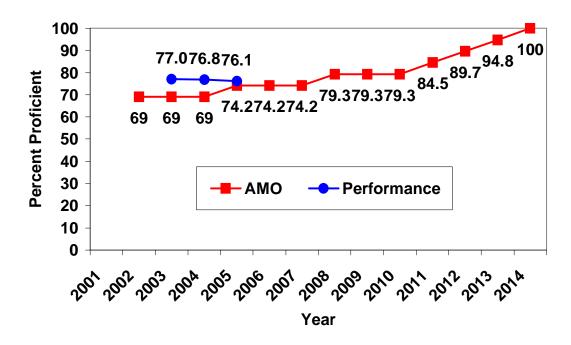
Reading Grade 4 Trajectory and Performance



Reading Grade 8 Trajectory and Performance

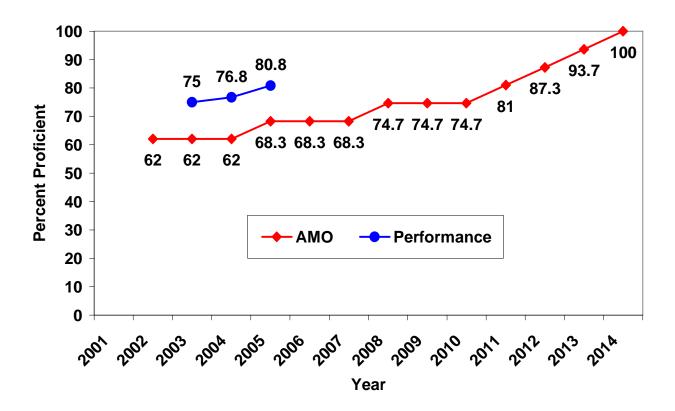


Reading Grade 11 Trajectory and Performance

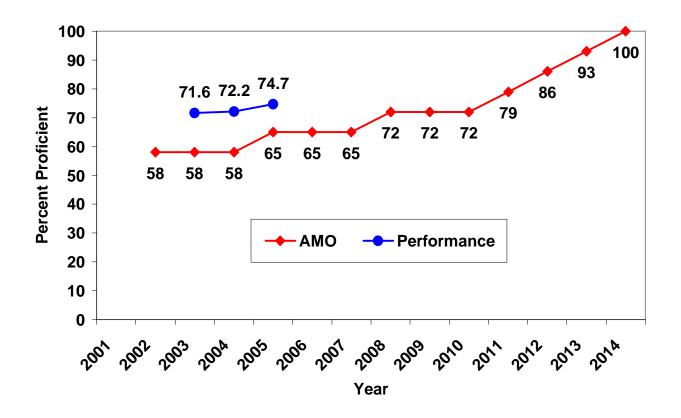


Annual Measurable Objectives for Reading Percent Proficient on ITBS/ITED							
Year	Grade 3	Grade 4	Grade 5	Grade 6	Grade 7	Grade 8	Grade 11
2002	61.2	64	64.6	54.5	57.3	60	69
2003	61.2	64	64.6	54.5	57.3	60	69
2004	61.2	64	64.6	54.5	57.3	60	69
2005	67.7	70	70.5	62.1	64.4	66.7	74.2
2006	67.7	70	70.5	62.1	64.4	66.7	74.2
2007	67.7	70	70.5	62.1	64.4	66.7	74.2
2008	74.1	76	76.4	69.7	71.5	73.3	79.3
2009	74.1	76	76.4	69.7	71.5	73.3	79.3
2010	74.1	76	76.4	69.7	71.5	73.3	79.3
2011	80.6	82	82.3	77.3	78.7	80	84.5
2012	87.1	88	88.2	84.8	85.8	86.7	89.7
2013	93.5	94	94.1	92.4	92.9	93.3	94.8
2014	100.0	100.0	100.0	100.0	100.0	100.0	100.0

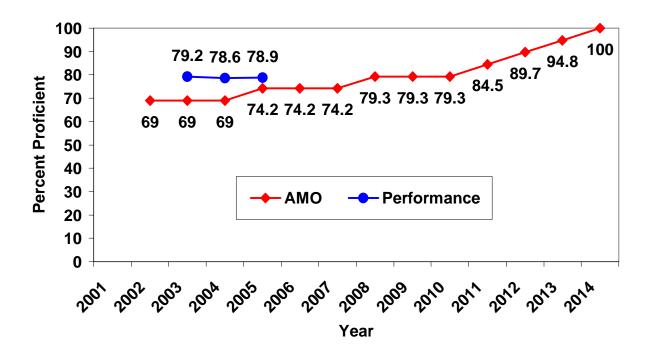
Mathematics Grade 4 Trajectory and Performance



Mathematics Grade 8 Trajectory and Performance



Mathematics Grade 11 Trajectory and Performance



Annual Measurable Objectives for Mathematics Percent Proficient on ITBS/ITED							
					Grade		
Year	3	4	5	6	7	8	11
2002	60.9	62.0	64.9	59.2	58.0	58.0	69.0
2003	60.9	62.0	64.9	59.2	58.0	58.0	69.0
2004	60.9	62.0	64.9	59.2	58.0	58.0	69.0
2005	67.4	68.3	70.8	66.0	65.0	65.0	74.2
2006	67.4	68.3	70.8	66.0	65.0	65.0	74.2
2007	67.4	68.3	70.8	66.0	65.0	65.0	74.2
2008	73.9	74.7	76.6	72.8	72.0	72.0	79.3
2009	73.9	74.7	76.6	72.8	72.0	72.0	79.3
2010	73.9	74.7	76.6	72.8	72.0	72.0	79.3
2011	80.5	81.0	82.5	79.6	79.0	79.0	84.5
2012	87.0	87.3	88.3	86.4	86.0	86.0	89.7
2013	93.5	93.7	94.2	93.2	93.0	93.0	94.8
2014	100.0	100.0	100.0	100.0	100.0	100.0	100.0

B. ACT

ACT is designed to assess high school students' general education development and their readiness to complete college level work. Among the states that have more than 50% of high school seniors that took the ACT, lowa consistently ranks well compared to other states (see table on the following page). For 2006, the average lowa ACT score increased to 22.1 placing lowa the third highest state average in the nation. (Minnesota averaged 22.3 and Wisconsin averaged 22.2).

The multiple-choice ACT tests cover four skill areas: English, math, reading, and science. The writing test, which is a separate optional test, measures skill in planning and writing a short essay. According to ACT figures, 65% of Iowa 2006 high school graduates took the ACT multiple-choice tests.

IOWA'S RANK IN THE NATION ON AVERAGE COMPOSITE ACT SCORES AMONG STATES WHERE ACT IS THE PRIMARY COLLEGE ENTRANCE EXAMINATION, 1991 to 2006

Graduating Class	ACT Average Composite Score	National Rank	
1991	21.7	1 tied with WI	
1992	21.6	1 tied with WI	
1993	21.8	1 tied with WI	
1994	21.9	1	
1995	21.8	3	
1996	21.9	3	
1997	22.1	2 tied with MN	
1998	22.1	3	
1999	22.0	3	
2000	22.0	2 tied with MN	
2001	22.0	3	
2002	22.0	3	
2003	22.0	2 tied with MN	
2004	22.0	3	
2005	22.0	3	
2006	22.1	3	

Source: American College Testing Program, ACT assessment results, Summary Report for Iowa.

C. Correlation of Iowa Tests to ACT

A number of studies have established a high correlation between the scores on the lowa Tests and scores on the ACT.

Studies dating back to the 1980s indicate that a student's score on the Iowa Tests (grades 8-11) has high predictive validity of the student's ACT score. Per Iowa Testing Program research guide citing a 1998 study of 8th grade ITBS Core Total and ACT composite scores showed, "...Predictive validity coefficients in this study were .76, .81,

and .78 for fall, midyear, and spring...[testing periods]. Predictive validity coefficients of this magnitude compare favorably with those of ...the high school years." The same document cites the predictive validity coefficients of ITED scores compared with ACT scores of .85, .86, and .85 for grades 9, 10, and 11 respectively (per a 1998 citation).

D. National Assessment of Educational Progress (NAEP)

Another measure of academic progress is the National Assessment of Educational Progress (NAEP). NAEP differs from the Iowa Tests in multiple ways. NAEP is a survey instrument given only to a sample of the students in Iowa in grades 4, 8, and 12. The NAEP is a long comprehensive assessment. If a child were to take all of the questions in mathematics or reading the test would take more than five hours to administer. Each student takes only part of the assessment generally two 25-minute portions. Individual student, school, or district results are not reported. State results are received for reading, mathematics, writing, and science in grades four and eight.

The Iowa Tests are census instruments given to each child. Furthermore, each child takes the entire Iowa Test in Reading Comprehension and Mathematics and receives individual results. The following table gives additional comparisons between NAEP and the Iowa Tests.

Brief Comparison of NAEP and ITBS

	NAEP	ITBS
Students tested	Two-stage stratified random sample of schools and students	Almost all students
	During the 04-05 school year	During the 04-05 school year
	approximately 8% of grade 4	approximately 98% of grade 4
	students were administered the	students were administered the
	NAEP reading assessment.	ITBS reading assessment.
Item formats	Multiple-choice, short	Multiple choice
	constructed-response, and	
	extended constructed-response	
Available levels	Grades 4, 8, and 12	Grades K through 12 – Levels 5
		through 17/18
Proficiency Levels	Three: Basic, Proficient,	Six: Low (Weak and Marginal),
	Advanced (Below Basic is not	Intermediate (Moderate and
	considered a reporting level by	Skilled), High (Accomplished
	NAEP)	and Distinguished)
Administration	6-week period beginning in late	Norms available for testing in
timeline	January during selected years	fall, midyear, or spring
Administration	Outside staff (Westat)	School staff
Administration	Each student takes two	Allotted time for each subtest
time	separately-timed, 25 minute	varies
	sections of items; each student	
	takes a portion of the whole test	
Reports	In lowa the state level is the	Student, classroom, building,
	smallest level of report	and district data are available;
		reports of item analysis are also
		available

Page 37

	NAEP	ITBS
Scoring	Utilizes Item Response Theory (IRT)	Based on percent correct
Scores	State standard scores and percent at each proficiency level	State and nationally referenced standard scores, grade equivalents (levels K-15), percentile ranks
Accommodations*	Available for SD and ELL students and include extended time, small group, etc.	Available for SD and ELL students and include extended time, small group, etc.

^{*}If needed, students with disabilities have the right to receive accommodations during testing. When used during testing, an accommodation generally does not change the test content or difficulty. Rather, an accommodation allows students to demonstrate what they know by reducing the interference of the disability. Individual Education Plans (IEPs) must include a statement of individual modifications and accommodations necessary for a student with a disability to participate in assessments.

National Assessment of Educational Progress Results

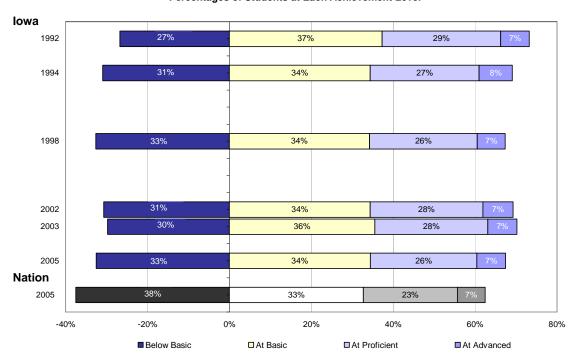
NAEP scores are available as standard scores and as performance levels. NAEP has four levels: below basic, basic, proficient, and advanced. NAEP does not consider the "below basic" as a proficiency level. Scores below the basic level, called "below basic," are reported, however. The scores reported here use the three performance levels.

NAEP defines the three performance levels as follows: "The Basic level denotes partial mastery of prerequisite knowledge and skills that are fundamental for proficient work at each grade. The Proficient level represents solid academic performance and demonstrated competence over challenging subject matter. The Advanced level signifies superior performance." (see http://nces.ed.gov/nationsreportcard/). To be considered "proficient" on NAEP, students must score in the top two performance levels (proficient and advanced). Students scoring in the "basic" level are not considered proficient on NAEP.

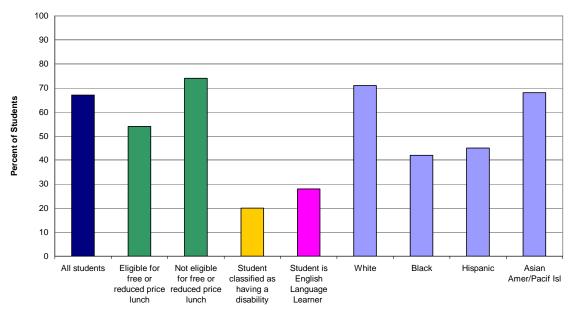
NAEP Reading

lowa students take the NAEP Reading Assessment every two years in grades 4 and 8. The last time it was administered was in 2005. The percentage of fourth grade students in lowa who performed at or above Basic was 67 percent. The percentage of eighth grade students in lowa who performed at or above Basic was 79 percent. Neither was significantly different from that in 2003 (70 percent and 79 percent). Some of the achievement gaps White/Black (grade four), White/Hispanic (grade eight), and eligible for free/reduced-price lunch/not eligible for free/reduced-price lunch (grade four and grade eight) appeared to have closed slightly in 2005 although a gap still remains.

Grade 4 Iowa NAEP Reading, All Students Percentages of Students at Each Achievement Level

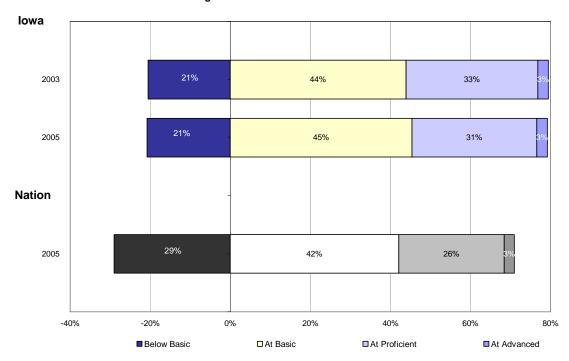


Grade 4 Reading 2005
Percent At or Above the Basic Achievement Level for NAEP
All Students and Selected Subgroups

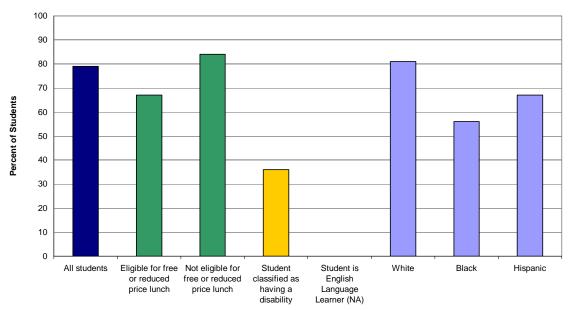


Note that groups represented are not independent.

Grade 8 Iowa NAEP Reading, All Students Percentages of Students at Each Achievement Level



NAEP Grade 8 Reading 2005 Percent At or Above the Basic Achievement Level All Students and Selected Subgroups

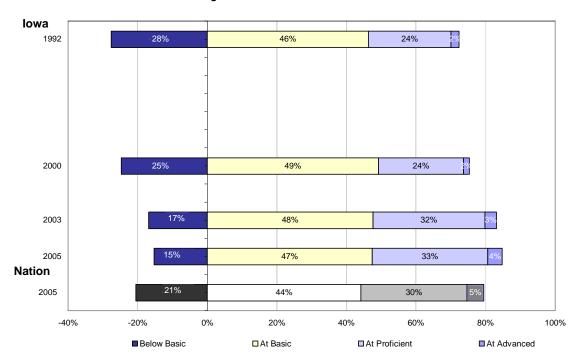


Note that groups represented are not independent.

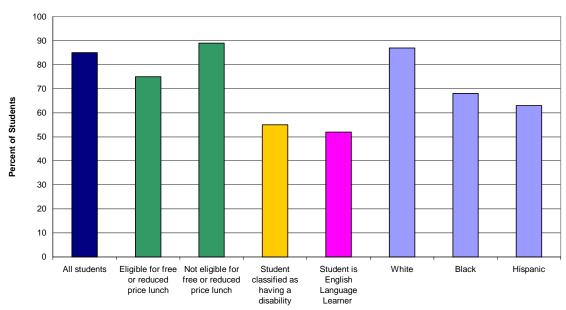
NAEP Mathematics

lowa students also take the NAEP Mathematics Assessment every two years in grades 4 and 8. The last time it was administered was in 2005. The percentage of students in lowa who performed at or above Basic was 85 percent in fourth grade and 75 percent in eighth grade. The average scale score of fourth grade Black students in lowa was higher in 2005 (224) than in 2003 (215). The average scale scores of White and Hispanic students in lowa were not significantly different between 2003 and 2005. The average scale score of fourth grade students who are eligible for free/reduced price lunch improved from 2003 to 2005 (227 to 231). Some of the achievement gaps White/Black (grade four), White/Hispanic (grade eight), and eligible for free/reduced-price lunch/not eligible for free/reduced-price lunch (grade four and grade eight) appeared to have closed slightly in 2005, but still remained unacceptable.

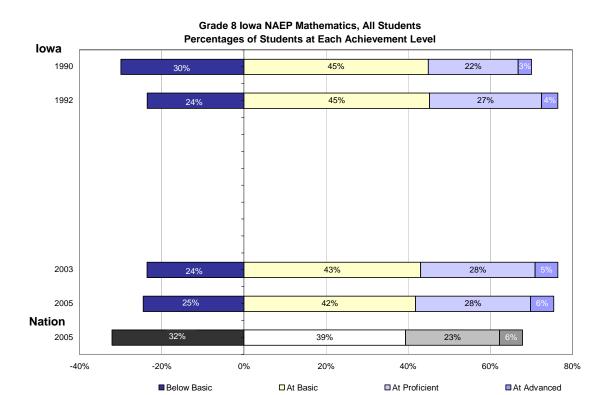
Grade 4 Iowa NAEP Mathematics, All Students
Percentages of Students at Each Achievement Level



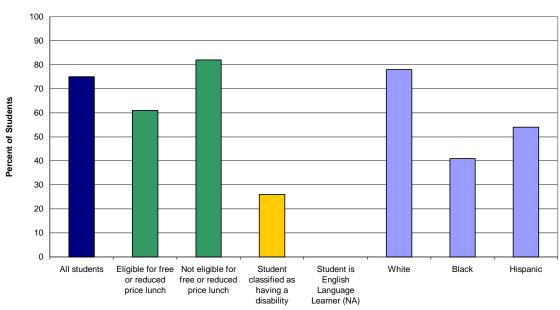
NAEP Grade 4 Mathematics 2005 Percent At or Above the Basic Achievement Level All Students and Selected Subgroups



Note that groups represented are not independent.



NAEP Grade 8 Mathematics 2005 Percent At or Above the Basic Achievement Level All Students and Selected Subgroups

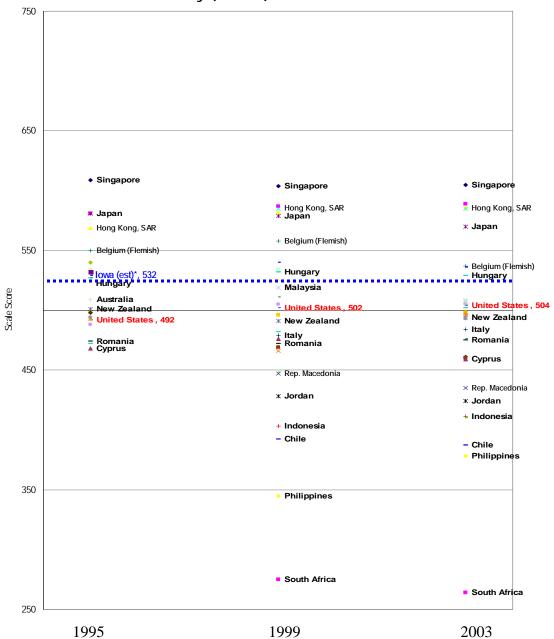


Note that groups represented are not independent.

E. Third International Mathematics and Science Study (TIMSS)

In September 1998, the National Center for Education Statistics issued a report linking the Third International Mathematics and Science Study (TIMSS) with the National Assessment of Educational Progress (NAEP) in mathematics. Iowa grade 8 students had a standard score of 284 on NAEP Mathematics in 1995 and that score has remained steady through 2005. The estimated TIMSS score for Iowa students from the 1995 NAEP was 532. The chart below shows the score estimated for Iowa in relation to other countries that participated in TIMSS. TIMSS will be administered again in 2007.

Trends in International Mathematics and Science Study (TIMSS) Grade 8 Mathematics Results



Page 45

F. Student Achievement Reports to the Public

1. Annual Progress Report (APR): The Iowa Administrative Code Chapter 12 defines the process of accreditation for Iowa's public districts and non-public schools. One of the requirements for accreditation is annual reporting to the public and to the Department of Education concerning student achievement as well as other indicators of student success (e.g. graduation rate). While Iowa initiated the APR process in the late 1990s prior to passage of No Child Left Behind, the NCLB Act requires additional reporting to the public beyond the data required by Iowa Administrative Code. To date, districts must report 136 different elements in the APR to meet federal NCLB requirements. Two pages of the APR are shown below. In order to assist districts in reporting required data elements (federal and state), the Iowa Department of Education has created an online reporting system that "pre-populates" much of the student achievement data. (Note: This report is due September 15 of each school year. Districts and non-public schools are currently preparing the report of the 2005-06 school year).

Bureau of Administration and School Improvement Services Annual Progress Report (APR) Minimum Requirements Due Date: September 15 2005-2006 Status, Public

INTRODUCTION AND REQUIREMENTS View Requirements The requirement file opens up in a new browser window. The current application browser window remains open.		
Form Click Form Name to Go to Corresponding Web Form Select forms from the navigation's "Form." drop down menu (at the top of all APR web forms), or use the links, found below, for each form name.	Status	
Certification Certification Buttons Appear on this Status Form	District Not Certified State Not Certified APR Not Completed A condition of the APR application is that Project Easier Spring must be certified before APR can be certified. The certify button will appear when this condition is met and all APR forms are completed. Date Project Easier Certified: 6/13/2006 1:24:53 PM	
GO TO Contact	Completed	
State Student Achievement Data	View summary of data from other input sources.	
NCLB Federal Student Achievement Data	View summary of data from other input sources.	
oo ⊤o Ch.12 Improvement Goals Reading	Not Completed	
GO TO Ch.12 Improvement Goals Mathematics	Not Completed	
GO TO Ch.12 Improvement Goals Science	Not Completed	
Ch.12 Alternative Assessment - Reading, Mathematics, and Science	STATE ROLE MESSAGE ONLY THESE FORMS NOT REQUIRED FOR PUBLICS	
GO TO Ch.12 Multiple Assessments	Not Completed	
SO TO Ch.12 Post-Secondary Data	Not Completed STATE ROLE MESSAGE ONLY: This form completed only by Publics or Non-Publics with a high school.	
60 TO Ch.12 Post-Secondary Dropout Data	For Display Only Data Available STATE ROLE MESSAGE ONLY: Dropout data are collected on this form for Non-Public and is display only for Public (data are from BEDS records). This form is available to Publics and Non-Publics with any or all grades 7 through 12.	
Other Data	View summary of data from other input sources.	
GO TO Additional State Requirements	Not Completed STATE ROLE MESSAGE ONLY: Early Intervention data are collected on this form for Public only.	
90 TO Athletic Eligibility	Not Completed STATE ROLE MESSAGE ONLY: This form completed only by Publics with a high school.	
GO TO Assurances	Not Completed	
NCLB Improvement Actions for SINA Buildings	No SINA identified buildings for this district.	

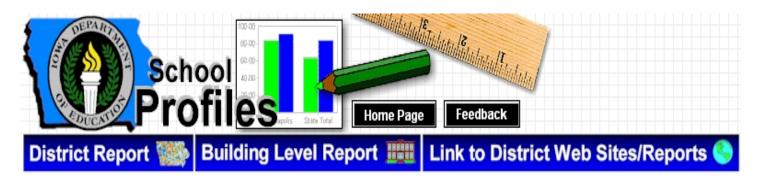
District Information

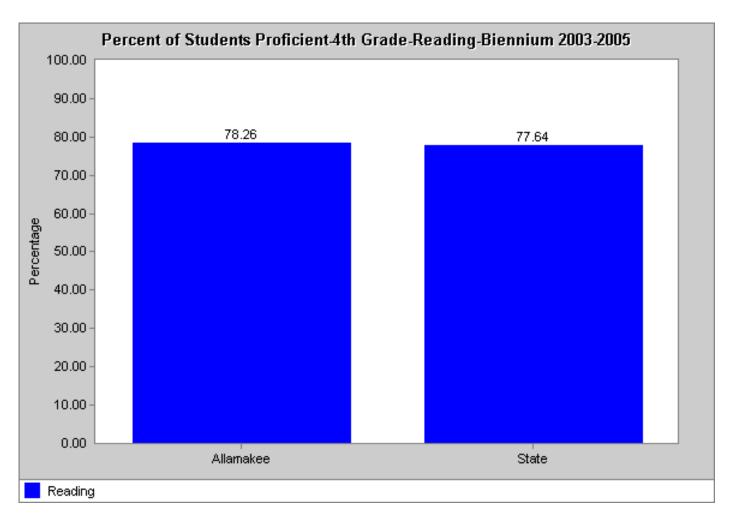
Authorized Agency

AGWSR Comm School District
511 State St
Ackley, Iowa 50601
AEA: AEA 267 (district filled under sea code 07)
School Improvement Consultant: Wilma.Gajdel@iowa.gov., 515-281-5332

All Dropouts 2004-2005	631 Total number of All Dropouts, grades 7-12.
	14180 Total number of All Students, grades 7-12.
	4.45% Total percentage of All Dropouts, grades 7-12. Percent arrived at by dividing the number of Dropouts by the total number of Students.
DROPOUT SUBGROUPS	Percent arrived at by amoning the number of Dropouts by the total number of Students.
Female	304 Total number of Female Dropouts, grades 7-12.
2004-2005	
	6949 Total number of Female Students, grades 7-12.
	4.375% Total percentage of Female Dropouts, grades 7-12. Percent arrived at by dividing the number of Dropouts by the total number of Students.
Male 2004-2005	327 Total number of Male Dropouts, grades 7-12.
	7231 Total number of Male Students, grades 7-12.
	4.522% Total percentage of Male Dropouts, grades 7-12. Percent arrived at by dividing the number of Dropouts by the total number of Students.
White (not of Hispanic origin)	332 Total number of White (not of Hispanic origin) Dropouts, grades 7-12.
2004-2005	9444 Total number of White (not of Hispanic origin) Students, grades 7-12.
	3.515% Total percentage of White (not of Hispanic origin) Dropouts, grades 7-12. Percent arrived at by dividing the number of Dropouts by the total number of Students.
Black (not of Hispanic origin)	110 Total number of Black (not of Hispanic origin) Dropouts, grades 7-12.
2004 2005	2349 Total number of Black (not of Hispanic origin) Students, grades 7-12.
	4.683% Total percentage of Black (not of Hispanic origin) Dropouts, grades 7-12. Percent arrived at by dividing the number of Dropouts by the total number of Students.
Hispanic 2004-2005	Total number of Hispanic Dropouts, grades 7-12.
	1618 Total number of Hispanic Students, grades 7-12.
	9.889% Total percentage of Hispanic Dropouts, grades 7-12. Percent arrived at by dividing the number of Dropouts by the total number of Students.
American Indian or Alaskan Native	5 Total number of American Indian or Alaskan Native Dropouts, grades 7-12.
2004-2005	99 Total number of American Indian or Alaskan Native Students, grades 7-12.
	5.051% Total percentage of American Indian or Alaskan Native Dropouts, grades 7-12. Percent arrived at by dividing the number of Dropouts by the total number of Students.
Asian or Pacific Islander 2004-2005	24 Total number of Asian or Pacific Islander Dropouts, grades 7-12.
	670 Total number of Asian or Pacific Islander Students, grades 7-12.
	3.582% Total percentage of Asian or Pacific Islander Dropouts, grades 7-12. Percent arrived at by dividing the number of Dropouts by the total number of Students.
Disabled/IEP 2004-2005	145 Total number of Disabled/IEP Dropouts, grades 7-12.
	3055 Total number of Disabled/IEP Students, grades 7-12.
	4.746% Total percentage of Disabled/IEP Dropouts, grades 7-12. Percent arrived at by dividing the number of Dropouts by the total number of Students.

(d) <u>School Profiles:</u> The Iowa Department of Education provides a webbased School Profiles site that allows the public to view student achievement by district and school building. The site can be accessed at http://www.iowaschoolprofiles.com/. Examples of the data from the website are shown below.





Example of report generated at School Profiles http://www.iowaschoolprofiles.com/

Section 3: Model Core Curriculum

A. Overview

The Model Core Curriculum provides lowa high school educators with key content and skills that students will need for success in literacy, mathematics and science. The Core Curriculum includes lessons for high school teachers of many subject areas to use in their classrooms. Current work focuses on professional development for high school educators to successfully implement the curriculum with their students. The intent of the Model Core Curriculum Project is twofold:

- 1. To ensure that all lowa students have access to a rigorous and relevant curriculum to prepare them for success in post-secondary education and the emerging global economy, and
- 2. To provide a tool for lowa educators to use to assure that essential subject matter is being taught and essential knowledge and skills are being learned.

The project was developed in response to needs identified by the Department and the State Board of Education through an intensive high school information and data gathering process undertaken in the spring of 2005 and the passage of Senate File 245 during the 2005 legislative session. SF 245 requires the identification of a model core curriculum and establishes a statewide core curriculum completion rate goal. It also requires districts to develop for each eighth grader a core curriculum plan and report progress on the completion of that plan to parents/guardians annually. To accomplish this project the Department convened a Project Lead Team and Work Teams in the content areas of literacy, mathematics, and science.

The charge given to the Project Lead Team was to define and collaborate with subcommittees in identifying the essential content and skills of a world-class core curriculum. The essential concepts and skill sets of the Model Core Curriculum in science, literacy, and math were developed after a thorough investigation of relevant sources including:

- ACT's College Readiness Standards
- College Board's Standards for College Success
- Information provided by Iowa Testing Programs
- International Center for Leadership in Education's Curriculum
- Survey of Essential Skills
- NAEP Frameworks in Reading, Writing, Mathematics, and Science
- Standards from the National Council of Teachers of English/International Reading Association
- Standards from the National Science Teachers' Association
- Standards from the National Council of Teachers of Mathematics
- ACHIEVE
- Partnership for 21st Century Skills (see Appendix G)

The Lead and Work teams also searched previous lowa education programs for findings relevant to the Model Core Curriculum, including:

- Iowa Learns Council
- The Iowa Department of Education's 2005 report on Rigor and Relevance
- Community conversations co-hosted by the Department and Education and local school districts, spring 2005
- High school visits last spring led by Director Judy Jeffrey
- Model Schools Project

The teams also researched the work of other experts in the area of curriculum and workplace skills. For example, Dr. Willard Daggett, President, International Center for Leadership in Education illustrates rigor and relevance in terms of four learning quadrants, with Quadrant A at the low end or basic knowledge and Quadrant D teaching more complex lessons. The goal is to infuse curriculum with more Quadrant C and D work. This "rigor and relevance framework" was endorsed by the Lead Team and all three Work Teams to help educators visualize how essential curriculum skills can be put into practice with real-world problem-solving examples. It also can be used by teachers to assess progress.

Quadrant C - Assimilation Students extend and refine their acquired knowledge to be able to use that knowledge automatically and routinely to analyze and solve problems and create solutions.	Quadrant D - Adaptation Students have the competence to think in complex ways and to apply their knowledge and skills. Even when confronted with perplexing unknowns, students are able to use extensive knowledge and skill to create solutions and take action that further develops their skills and knowledge.
Quadrant A - Acquisition Students gather and store bits of knowledge and information. Students are primarily expected to remember or understand this knowledge.	Quadrant B - Application Students use acquired knowledge to solve problems, design solutions, and complete work. The highest level of application is to apply knowledge to new and unpredictable situations.

Source: International Center for Leadership in Education

Daggett's work has shown that schools with the highest levels of rigor and relevance also had a strong program of student support – from family, peers, teachers, and community partnerships. (See also Appendix F; To read more, visit http://www.leadered.com/ and look for the "rigor and relevance" title).

Important considerations in completing this work included the following:

• The needs of students. These needs include not only legacy content like reading, writing, arithmetic, logical thinking, understanding the writings and ideas of the past, but also those Marc Prensky, author of "Digital Natives, Digital Immigrants" refers to as future content (2001). The "future" content is digital and technological, including software, hardware, robotics, nanotechnology, and genomics and the ethics, politics, sociology, and languages that come with them.

- The needs of a changing workforce. According to the U.S. Department of Labor, jobs requiring science, engineering, and technical training will increase by 51 percent between 1998 and 2008, four times faster than overall job growth. By 2008, there will be six million job openings for scientists, engineers, and technicians.
- The need to remain globally competitive. The sheer number of college graduates from other countries will change world dynamics. No longer do students from foreign countries have to come to the U.S. for higher education. No longer with the U.S. have enough engineers and scientists to fill the needs. Other countries will have the numbers that create new ideas, building companies that launch innovations, and produce goods wanted by the world.

B. Science Core Curriculum Highlights

The Science Model Core Curriculum, draws information from the National Science Education Standards (NSES). The recommendations reflect the belief that ALL students should experience science through a curriculum that is rigorous, relevant, global in its perspective, collaborative in nature, and connected by strong visible links to other areas of study. A more rigorous curriculum must see students questioning, evaluating and defending their findings. The science team targeted four essential subject areas, all recognized by NSES:

- Science as inquiry
- Physical science
- Earth and space science
- Life science

_

Science as inquiry and additional categories that address the application of knowledge are folded into the knowledge base by design. One other content category – unifying concepts and processes such as form and function or systems, order and organization – complement the other essential subjects. So it, too, is included.

C. Literacy Core Curriculum Highlights

Increasingly sophisticated levels of literacy are required by the student-turned-adult to successfully navigate society. Literacy allows people to be informed, to inform others and to make informed decisions. To meet these goals, the literacy curriculum identifies essential concepts or skill sets for reading, writing, speaking, listening, and thinking. Even viewing is included, recognition that the explosion of visual mediums creates an additional, significant means of communication. Recognizing the changing demands of the workplace, the curriculum also includes reading technical texts and functional documents. Also, while the most familiar writing forms are represented, "writing on demand" skills – considered important to job success – are incorporated. An interdisciplinary approach to teaching the core curriculums was mentioned by every content area and by the Lead Team. But the Literacy Team gives this the greatest emphasis, noting that literacy is fundamental to all teaching and learning.

D. Math Core Curriculum Highlights

Mathematics is the most-cited subject when talk turns to U.S. students losing ground to international students. The Math Team attributes that in part to schools' attempts to cover too many topics in too little depth. To avoid that trap, the curriculum identifies the "big ideas" for mathematics teaching. These essential skills, content and characteristics will arm students with a deep understanding of the most important mathematics. Important math content includes algebra, geometry, statistics and probability, and quantitative literacy. Essential skills for math touch on problem solving, communication, reasoning and proof, an ability to make connections, and representation. The report also identifies seven characteristics essential to a world-class mathematics curriculum:

- Teaching for understanding
- · Problem-based instructional tasks
- Distributed practice that is meaningful and purposeful
- Emphasis on Mathematical Modeling
- A focus on deep conceptual and procedural knowledge
- Effective use of technology
- Integrated and connected

E. Next Steps

While the Model Core Curriculum represents an improvement in curriculum, it isn't intended as a panacea for curriculum issues in Iowa schools.

- It must be tailored to fit local needs. Local districts should follow a similar review process to identify the steps most critical to delivering a world-class curriculum.
- Work must expand to other content areas. Social studies and foreign languages were both identified by the Lead Team as essential content for a world-class curriculum.
- Work also should expand to other areas of "21st Century skills, including media literacy, financial literacy, critical thinking, and problem solving.
- Professional development training for educators will be a vital component.
- Follow-up studies monitoring high schools that adopt key recommendations will be fundamental to evaluating the success of this project. The question that will require answering: Did this model curriculum really benefit lowa's students?

While the Core Curriculum has addressed some of the skills needed for student success (especially media and information literacy), the Partnership for 21st Century Skills has identified additional areas of achievement that students will need if they are to be internationally competitive. The Partnership for 21st Century Skills is discussed in detail on the next page. Skills include 21st Century content such as global awareness, financial, economic, business and entrepreneurial literacy, civic literacy, health and wellness awareness, and critical foreign languages. It is also recommended that learning and thinking skills be woven into the 21st Century skills. The lowa Core Curriculum needs to be extended to the additional 21st Century skills that have not yet been addressed including a deeper connection with career and technical education (see Appendix G). From the start, the Team talked of important "next steps", all critical to ensuring that this doesn't become the latest report to collect dust on a shelf. To that end, it adopted four recommendations:

- 1. Expand the work to other areas, specifically:
- Social Studies
- Foreign Language

- 21st Century Skills (see Appendix G for recommendations from the Partnership for 21st Century Skills)
- Health and Wellness
- 2. Expand work to elementary and middle schools, to ensure curriculum synergy with the entire kindergarten through 12th grade system. Support needed to do this will vary by district.
- 3. Allocate money for professional development to deepen the K-12 content and instructional expertise of lowa educators.
- 4. Call on the State Board of Education to be advocates for the plan.

Additional information on the Model Core Curriculum is available at: http://www.state.ia.us/educate/ecese/hsmcc/doc/06_MCC_final-report.pdf.

Appendix A Implementation Details: Teacher Performance, Compensation, and Career Development Legislation

The following table shows the implementation of each component of the Teacher Performance, Compensation, and Career Development legislation along with some of the results attributed to the legislation.

Component	Implementation	Results
Iowa Teaching Standards Mentoring and Induction	Iowa Teaching Standards/Criteria developed by stakeholders; See Appendix B. 2001/02 AEAs develop Mentor Training;	The Iowa Teaching Standards and Criteria became the statewide expectation for all teachers. All Iowa school districts have an approved mentoring and induction program. All new
	 LEAs submit district plans for Mentoring; Rules passed for mentoring/induction 2002/03 All beginning teachers supported by Mentoring and Induction; Statewide Mentoring and Induction Network formed 2006/07: Counselors and teacher librarians added to Mentoring and Induction; Mentoring and Induction of new administrators mandated Additional information available: http://www.state.ia.us/educate/ecese/tqt/tc/resources.html 	teachers are assigned a mentor. First year teacher retention increased over the five year period, 2000-01 to 2005-2006, from 87% to 92%. Progress has been made in building partnerships among higher education institutions and K-12 schools to support a seamless system for new professionals, pre-service through induction.
Teacher Evaluation	 Evaluator system designed 2002/03 Evaluator training curriculum developed, trainers prepared, and training initiated 2003/04 Evaluation system in place for beginning teachers 	All administrators were required to successfully complete evaluator training in order to obtain the new evaluator license and renew their administrative endorsement and the corresponding general administrative endorsement. The cost of continuing the inservice training program is supported through registration

Component	Implementation	Results
	2005/06	fees.
	Performance reviews for career teachers in place Addition information: http://www.state.ia.us/educate/ecese/tqt/tc/teacheval.html	The Iowa Teaching Standards and Criteria became the statewide expectation for all teachers. The DE has developed and shared a model evaluation process and the summative evaluation instrument to be used at the culmination of the comprehensive performance review.
	2005-07	Since the initial Teacher Quality legislation was approved in 2002 group of 60 trainers have been prepared to train any and all teacher and administrator who wanted a new evaluators license. In the last four years over 3200 people have successfully completed the evaluator-training program.
	 Evaluator approval renewal curriculum under development 	
Iowa Content Network	Iowa Content Network teams trained and studies reviewed; this work is shared through the web. Studies continue to be added. 2003/04 Content Network refined and web-based. Studies	Resources have been provided to assist local districts in developing District Career Development Plans and Individual Teacher Development Plans. During the 2005-06 school year, the number of times consumers
	continue to be added. Network available at: http://www.state.ia.us/educate/ecese//tqt/tc/prodev/main.html	reviewed Content Network pages ranged from 298 to 1019 times per month. There are 160 reading, 102 mathematics, and 93 science reviews posted. Each review provides school personnel with information about the strategy, subjects in the study, and the results of the study. Also included in the table is the rating of the quality of the study (see Appendix C).

Component	Implementation	Results
Professional	2001/02	The DE along with partner
Development	 Iowa Professional 	organizations including AEAs
	Development Model drafted;	has built capacity to provide
	 AEA interviews conducted to 	technical assistance to local
	study PD practices	districts in the area of high
	throughout the state;	quality professional
	 Reading initiative ongoing 	development using the lowa
		Professional Development
	2002/03	Model. The DE has provided
	 Reading capacity building 	technical assistance and
	efforts continue;	resources to every AEA. All
	 Math initiative revised and 	AEAs report that they have
	expanded	provided resources and
		guidance to every local district
	2003/04	regarding the implementation of
	 Capacity Building Seminar 	quality professional
	Series trained 400 AEA and	development.
	partner LEA staff;	
	 Rules passed for District 	The Iowa Teacher Academies
	Career Plan and PD	assist local districts to access
	standards;	research based instructional
	 Training provided on District 	content. Iowa Teacher
	PD Plans	Academies 2005 had the
		following participation.
	2004/05	Second Chance Reading
	 Advanced Seminar Series to 	150
	build AEA and Administrator	CORI
	capacity for PD;	73
	 District Career Development 	QAR
	plans submitted;	76
	 Iowa Teacher Development 	CGI
	Academy conducted four	82
	Academy sessions	
		Additional Academies were
	2005/06	offered in SCR, QAR, CORI,
	 Individual plans (ICDP) 	and CGI beginning July and
	required;	August 2006.
	Additional Iowa Teacher	
	Development (ITD)	180 participants are enrolled in
	Academies scheduled;	Second Chance Reading for 06-
	Trainers prepared in a	07.
	training-of-trainers component	
	of the ITD Academies;	34 Trainers have been prepared
	Additional PD day added and	as Second Chance Reading
	funded for all school districts	Trainers and will begin training
	A delicitation and trades	during the 06-07 school year.
	Additional information available:	The number of high quality
	http://www.state.ia.us/educate/ecese/	professional development days
	tqt/tc/prodev.html	provided to teachers in Iowa

Component	Implementation	Results
		has increased. The median number of High Quality Professional Development FTE days districts across Iowa offered in the year prior to participation in the student achievement/teacher quality program (generally 2000-2001 school year) was 4 days. The median number of High Quality Professional Development FTE days offered in the 2005-2006 school year for districts was 7, an increase of three days.
Team-based Variable Pay	Team-based Variable Pay Pilot (TBVP) initiated. 18 pilot schools throughout the state were selected	TBVP was implemented as a pilot and evaluated. Results of the evaluation failed to show sufficient evidence of improved student academic results.
	2002/03 TBVP Year 1 study complete; TBVP not funded	
	2003/04 2 nd TBVP pilot completed with ten schools participating	
	3 rd TBVP pilot completed with nine schools participating	
	Additional information available: http://www.state.ia.us/educate/ecese/tqt/tc/tbvp.html	
Career Paths and Compensation	Beginning teacher minimum salary set at \$24,500 and career teacher's minimum salary set at \$26,500	Teacher minimum salaries increased.
	First year career teacher minimum salary set at \$25,500.	
	2006/07	
	Beginning teacher minimum	

Component	Implementation	Results
	salary set at \$25,500, first year career teacher minimum salary at \$26,500, and all other career teacher's minimum salary set at \$27,500	
National Board Certification	 National Board support for lowa teachers initiated 1999-2006 Iowa General Assembly appropriated funds to support National Board Certified teachers Iowa General Assembly appropriated funds for a National Board Certification support program 	Increased the number of Iowa teachers completing a rigorous preparation to achieve National Board Certification. As of August 2005, 479 Iowa teachers have successfully completed requirements to become a National Board Certified teacher.

Appendix B: Iowa Teaching Standards and Model Criteria

Adopted by the State Board of Education May 10, 2002

Standard 1

Demonstrates ability to enhance academic performance and support for implementation of the school district's student achievement goals.

Model Criteria

The teacher:

- a. Provides evidence of student learning to students, families, and staff.
- b. Implements strategies supporting student, building, and district goals.
- c. Uses student performance data as a guide for decision making.
- d. Accepts and demonstrates responsibility for creating a classroom culture that supports the learning of every student.
- e. Creates an environment of mutual respect, rapport, and fairness.
- f. Participates in and contributes to a school culture that focuses on improved student learning.
- g. Communicates with students, families, colleagues, and communities effectively and accurately.

Standard 2

Demonstrates competence in content knowledge appropriate to the teaching position.

Model Criteria

The teacher:

- a. Understands and uses key concepts, underlying themes, relationships, and different perspectives related to the content area.
- b. Uses knowledge of student development to make learning experiences in the content area meaningful and accessible for every student.
- c. Relates ideas and information within and across content areas.
- d. Understands and uses instructional strategies that are appropriate to the content area.

Standard 3

Demonstrates competence in planning and preparing for instruction.

Model Criteria

The teacher:

- Uses student achievement data, local standards, and the district curriculum in planning for instruction.
- b. Sets and communicates high expectations for social, behavioral, and academic success of all students.
- Uses student's developmental needs, backgrounds, and interests in planning for instruction.
- d. Selects strategies to engage all students in learning.
- e. Uses available resources, including technologies, in the development and sequencing of instruction.

Standard 4

Uses strategies to deliver instruction that meets the multiple learning needs of students.

Model Criteria

The teacher:

- a. Aligns classroom instruction with local standards and district curriculum.
- Uses research-based instructional strategies that address the full range of cognitive levels.
- c. Demonstrates flexibility and responsiveness in adjusting instruction to meet student needs.
- d. Engages students in varied experiences that meet diverse needs and promote social, emotional, and academic growth.
- e. Connects students' prior knowledge, life experiences, and interests in the instructional process.
- f. Uses available resources, including technologies, in the delivery of instruction.

Standard 5

Uses a variety of methods to monitor student learning.

Model Criteria

The teacher:

- a. Aligns classroom assessment with instruction.
- b. Communicates assessment criteria and standards to all students and parents.
- Understands and uses the results of multiple assessments to guide planning and instruction.
- d. Guides students in goal setting and assessing their own learning.
- e. Provides substantive, timely, and constructive feedback to students and parents.
- f. Works with other staff and building and district leadership in analysis of student progress.

Standard 6

Demonstrates competence in classroom management.

Model Criteria

The teacher:

- a. Creates a learning community that encourages positive social interaction, active engagement, and self-regulation for every student.
- b. Establishes, communicates, models, and maintains standards of responsible student behavior.
- c. Develops and implements classroom procedures and routines that support high expectations for student learning.
- d. Uses instructional time effectively to maximize student achievement.
- e. Creates a safe and purposeful learning environment.

Standard 7

Engages in professional growth.

Model Criteria

The teacher:

- a. Demonstrates habits and skills of continuous inquiry and learning.
- b. Works collaboratively to improve professional practice and student learning.

- c. Applies research, knowledge, and skills from professional development opportunities to improve practice.
- d. Establishes and implements professional development plans based upon the teacher's needs aligned to the Iowa teaching standards and district/building student achievement goals.

Standard 8

Fulfills professional responsibilities established by the school district.

Model Criteria

The teacher:

- a. Adheres to board policies, district procedures, and contractual obligations.
- b. Demonstrates professional and ethical conduct as defined by state law and district policy.
- c. Contributes to efforts to achieve district and building goals.
- d. Demonstrates an understanding of and respect for all learners and staff.
- e. Collaborates with students, families, colleagues, and communities to enhance student learning.

Appendix C: Iowa Content Network, The Research Continuum

The Content Network Teams reviewed the research articles based on a continuum that measured the research according to specific criteria. The pyramid image and the comments that follow identify these criteria.

LEVEL 5—Gold Standard

For the purposes of the Content Network reviews, the No Child Left Behind criteria for quality research represents the "gold standard" or best quality research. These criteria correspond to the top of the pyramid. Research designs most likely to produce "Level 5" results are research



designs that randomly assign subjects to treatment and control groups. They also provide control for most threats to internal validity and yield findings that generate the greatest confidence in student effect.

LEVEL 4—Strong Evidence

Research designs most likely to produce "Level 4" results do not randomly assign subjects to treatment and control groups; however other design elements control many of the threats to internal validity.

LEVEL 3—Promising Studies

Research can be classified as "promising" under certain conditions. First, if a research design is weak but findings have been consistent across multiple replications, the treatment under study can be said to have promise. Second, if single strategies that have been studied under true experimental conditions are combined with multiple strategies, practices, and routines and the composite then studied with a weaker design with positive results, the findings can be classified as promising.

LEVEL 2—Marginal

One-time case studies clearly fit into the marginal category. Many of the classroom experiments conducted by individual teachers in their classrooms and reported in popular, but non-peer reviewed, journals fit this classification. This is not to suggest that such reports are worthless, but rather that they fail to control for any of the competing hypotheses that might account for changes in the dependent variable.

LEVEL 1—No Empirical Evidence

Two types of reports of successful innovations are common in the educational literature on curriculum and instruction, neither of which provides credible evidence that an innovation would consistently result in benefits to students.

The first is "advocacy" writing—articles that passionately espouse specific curriculum content or an approach to teaching. These articles often provide extensive rationales for why teachers and schools should adopt specific practices but provide no data to document the effects on students with whom these practices have been employed. In some cases, claims of significant growth are made for specific practices, again with no documentation.

Second types of report frequently encountered in educational publications are those that claim significant gains in student achievement for schools of districts or states. At first glance, these reports appear to provide empirical evidence because they present test scores that show rising scores on a test over a period of years. Further reading of the report, however, reveals that the treatment was a high-stakes test or a system of rewards and sanctions for high and low performing schools. We are left with no idea of what may have occurred differently in classrooms with students that might account for changes in student achievement.

Finally, testimonials and anecdotes frequently provided by publishers of educational materials to attest to the efficacy of their products do not meet the criteria for evidence that is commonly expected in scientifically based research.

Appendix D: Grade-Level Indicators Corresponding to the Iowa Tests for Grades 3-12

Reading Content Standards:

A. Students can comprehend what they read in a variety of literary and informational texts.

Grade 3 Indicators:

- 1. Understand stated information
- 2. Determine the meaning of new words from their context
- 3. Draw conclusions, make inferences, and deduce meaning
- 4. Infer traits, feelings, and motives of characters
- 5. Interpret information in new contexts
- 6. Interpret nonliteral language
- 7. Determine the main idea of a text
- 8. Identify the author's views or purpose
- 9. Analyze the style or structure of a text

Grade 4 Indicators:

- 1. Understand stated information
- 2. Determine the meaning of new words from their context
- 3. Draw conclusions, make inferences, and deduce meaning
- 4. Infer traits, feelings, and motives of characters
- 5. Interpret information in new contexts
- Interpret nonliteral language
- 7. Determine the main idea of a text
- 8. Identify the author's views or purpose
- 9. Analyze the style or structure of a text

Grade 5 Indicators:

- 1. Understand stated information
- 2. Determine the meaning of new words from their context
- 3. Draw conclusions, make inferences, and deduce meaning
- 4. Infer traits, feelings, and motives of characters
- 5. Interpret information in new contexts
- 6. Interpret nonliteral language
- 7. Determine the main idea of a text
- 8. Identify the author's views or purpose
- 9. Analyze the style or structure of a text

Grade 6 Indicators:

- 1. Understand stated information
- 2. Determine the meaning of new words from their context
- 3. Draw conclusions, make inferences, and deduce meaning
- 4. Infer traits, feelings, and motives of characters
- 5. Interpret information in new contexts

- 6. Interpret nonliteral language
- 7. Determine the main idea of a text
- 8. Identify the author's views or purpose
- 9. Analyze the style or structure of a text

Grade 7 Indicators:

- 1. Understand stated information
- 2. Determine the meaning of new words from their context
- 3. Draw conclusions, make inferences, and deduce meaning
- 4. Infer traits, feelings, and motives of characters
- 5. Interpret information in new contexts
- 6. Interpret nonliteral language
- 7. Determine the main idea of a text
- 8. Identify the author's views or purpose
- 9. Analyze the style or structure of a text

Grade 8 Indicators:

- 1. Understand stated information
- 2. Determine the meaning of new words from their context
- 3. Draw conclusions, make inferences, and deduce meaning
- 4. Infer traits, feelings, and motives of characters
- 5. Interpret information in new contexts
- 6. Interpret nonliteral language
- 7. Determine the main idea of a text
- 8. Identify the author's views or purpose
- 9. Analyze the style or structure of a text

Grade 9 Indicators:

- 1. Understand stated information
- 2. Determine the literal meaning of specific words
- 3. Draw conclusions and make inferences and generalizations
- 4. Infer traits, feelings, and motives of characters or individuals
- 5. Make predictions based on stated information
- 6. Interpret nonliteral language used in a text
- 7. Determine the main idea, topic, or theme
- 8. Identify the author's views or purposes
- 9. Distinguish among facts, opinions, and assumptions
- 10. Recognize aspects of a passage's style and structure and recognize literary techniques.

Grade 10 Indicators:

- 1. Understand stated information
- 2. Determine the literal meaning of specific words
- 3. Draw conclusions and make inferences and generalizations
- 4. Infer traits, feelings, and motives of characters or individuals
- 5. Make predictions based on stated information
- 6. Interpret nonliteral language used in a text

- 7. Determine the main idea, topic, or theme
- 8. Identify the author's views or purposes
- 9. Distinguish among facts, opinions, and assumptions
- 10. Recognize aspects of a passage's style and structure and recognize literary techniques.

Grade 11 Indicators:

- Understand stated information
- 2. Determine the literal meaning of specific words
- 3. Draw conclusions and make inferences and generalizations
- 4. Infer traits, feelings, and motives of characters or individuals
- 5. Make predictions based on stated information
- 6. Interpret nonliteral language used in a text
- 7. Determine the main idea, topic, or theme
- 8. Identify the author's views or purposes
- 9. Distinguish among facts, opinions, and assumptions
- 10. Recognize aspects of a passage's style and structure and recognize literary techniques.

Grade 12 Indicators:

- 1. Understand stated information
- 2. Determine the literal meaning of specific words
- 3. Draw conclusions and make inferences and generalizations
- 4. Infer traits, feelings, and motives of characters or individuals
- 5. Make predictions based on stated information
- 6. Interpret nonliteral language used in a text
- 7. Determine the main idea, topic, or theme
- 8. Identify the author's views or purposes
- 9. Distinguish among facts, opinions, and assumptions
- 10. Recognize aspects of a passage's style and structure and recognize literary techniques.

Math Content Standards:

- A. Students can understand and apply a variety of math concepts.
- B. Students can understand and apply methods of estimation.
- C. Students can solve a variety of math problems.
- D. Students can interpret data presented in a variety of ways.

Grade 3 Indicators:

- A. Students can understand and apply a variety of math concepts.
 - 1. Represent, compare, and order numbers
 - 2. Describe and apply properties of numbers
 - 3. Classify numbers by divisibility
 - 4. Demonstrate ways of performing operations
 - 5. Use place value; write numbers in standard, expanded, and exponential form
 - 6. Use and interpret operational and relational symbols
 - 7. Solve equations and inequalities

- 8. Use variable expressions to model situations
- 9. Explore numerical patterns
- 10. Identify, classify, and compare geometric figures
- 11. Describe geometric properties, patterns, and relationships
- 12. Apply the concepts of perimeter, area, and volume
- 13. Measure length/distance, time, temperature, weight, mass, and volume
- 14. Estimate measurements with appropriate precision
- 15. Identify and use appropriate units of measurement
- 16. Apply probability concepts and counting rules
- 17. Understand and apply measures of central tendency and variability
- B. Students can understand and apply methods of estimation.
 - 1. Use standard rounding to estimate
 - 2. Use order of magnitude to estimate
 - 3. Use number sense to estimate
- C. Students can solve a variety of math problems.
 - 1. Solve single-step and multiple-step math problems
 - 2. Identify extraneous or insufficient information in problems
 - 3. Choose a method for solving a problem
- D. Students can interpret data presented in a variety of ways.
 - 1. Read amounts on scales of bar and line graphs
 - 2. Locate amounts in specific cells of a table
 - 3. Compare quantities to determine ranks, sums, or differences and to find ratios
 - 4. Use tables and graphs to determine rates or identify trends, understand underlying or functional relationships, and generalize or draw conclusions

Grade 4 Indicators:

- A. Students can understand and apply a variety of math concepts.
 - 1. Represent, compare, and order numbers
 - 2. Describe and apply properties of numbers
 - 3. Classify numbers by divisibility
 - 4. Demonstrate ways of performing operations
 - 5. Use place value; write numbers in standard, expanded, and exponential form
 - 6. Use and interpret operational and relational symbols
 - 7. Solve equations and inequalities
 - 8. Use variable expressions to model situations
 - 9. Explore numerical patterns
 - 10. Identify, classify, and compare geometric figures
 - 11. Describe geometric properties, patterns, and relationships
 - 12. Apply the concepts of perimeter, area, and volume
 - 13. Measure length/distance, time, temperature, weight, mass, and volume
 - 14. Estimate measurements with appropriate precision
 - 15. Identify and use appropriate units of measurement
 - 16. Apply probability concepts and counting rules
 - 17. Understand and apply measures of central tendency and variability

- B. Students can understand and apply methods of estimation.
 - 1. Use standard rounding to estimate
 - 2. Use order of magnitude to estimate
 - 3. Use number sense to estimate
- C. Students can solve a variety of math problems.
 - 1. Solve single-step and multiple-step math problems
 - 2. Identify extraneous or insufficient information in problems
 - 3. Choose a method for solving a problem
- D. Students can interpret data presented in a variety of ways.
 - 1. Read amounts on scales of bar and line graphs
 - 2. Locate amounts in specific cells of a table
 - 3. Compare quantities to determine ranks, sums, or differences and to find ratios
 - 4. Use tables and graphs to determine rates or identify trends, understand underlying or functional relationships, and generalize or draw conclusions

Grade 5 Indicators:

- A. Students can understand and apply a variety of math concepts.
 - 1. Represent, compare, and order numbers
 - 2. Describe and apply properties of numbers
 - 3. Classify numbers by divisibility
 - 4. Demonstrate ways of performing operations
 - 5. Use place value; write numbers in standard, expanded, and exponential form
 - 6. Use and interpret operational and relational symbols
 - 7. Solve equations and inequalities
 - 8. Use variable expressions to model situations
 - 9. Explore numerical patterns
 - 10. Identify, classify, and compare geometric figures
 - 11. Describe geometric properties, patterns, and relationships
 - 12. Apply the concepts of perimeter, area, and volume
 - 13. Measure length/distance, time, temperature, weight, mass, and volume
 - 14. Estimate measurements with appropriate precision
 - 15. Identify and use appropriate units of measurement
 - 16. Apply probability concepts and counting rules
 - 17. Understand and apply measures of central tendency and variability
- B. Students can understand and apply methods of estimation.
 - 1. Use standard rounding to estimate
 - 2. Use order of magnitude to estimate
 - 3. Use number sense to estimate
- C. Students can solve a variety of math problems.
 - 1. Solve single-step and multiple-step math problems
 - 2. Identify extraneous or insufficient information in problems
 - 3. Choose a method for solving a problem

- D. Students can interpret data presented in a variety of ways.
 - 1. Read amounts on scales of bar and line graphs
 - 2. Locate amounts in specific cells of a table
 - 3. Compare quantities to determine ranks, sums, or differences and to find ratios
 - 4. Use tables and graphs to determine rates or identify trends, understand underlying or functional relationships, and generalize or draw conclusions

Grade 6 Indicators:

- A. Students can understand and apply a variety of math concepts.
 - 1. Represent, compare, and order numbers
 - 2. Describe and apply properties of numbers
 - 3. Classify numbers by divisibility
 - 4. Demonstrate ways of performing operations
 - 5. Use place value; write numbers in standard, expanded, and exponential form
 - 6. Use and interpret operational and relational symbols
 - 7. Solve equations and inequalities
 - 8. Use variable expressions to model situations
 - 9. Explore numerical patterns
 - 10. Identify, classify, and compare geometric figures
 - 11. Describe geometric properties, patterns, and relationships
 - 12. Apply the concepts of perimeter, area, and volume
 - 13. Measure length/distance, time, temperature, weight, mass, and volume
 - 14. Estimate measurements with appropriate precision
 - 15. Identify and use appropriate units of measurement
 - 16. Apply probability concepts and counting rules
 - 17. Understand and apply measures of central tendency and variability
- B. Students can understand and apply methods of estimation.
 - 1. Use standard rounding to estimate
 - 2. Use order of magnitude to estimate
 - Use number sense to estimate
- C. Students can solve a variety of math problems.
 - 1. Solve single-step and multiple-step math problems
 - 2. Identify extraneous or insufficient information in problems
 - 3. Choose a method for solving a problem
- D. Students can interpret data presented in a variety of ways.
 - 1. Read amounts on scales of bar and line graphs
 - 2. Locate amounts in specific cells of a table
 - 3. Compare quantities to determine ranks, sums, or differences and to find ratios
 - 4. Use tables and graphs to determine rates or identify trends, understand underlying or functional relationships, and generalize or draw conclusions

Grade 7 Indicators:

- A. Students can understand and apply a variety of math concepts.
 - 1. Represent, compare, and order numbers
 - 2. Describe and apply properties of numbers
 - 3. Classify numbers by divisibility
 - 4. Demonstrate ways of performing operations
 - 5. Use place value; write numbers in standard, expanded, and exponential form
 - 6. Use and interpret operational and relational symbols
 - 7. Solve equations and inequalities
 - 8. Use variable expressions to model situations
 - 9. Explore numerical patterns
 - 10. Identify, classify, and compare geometric figures
 - 11. Describe geometric properties, patterns, and relationships
 - 12. Apply the concepts of perimeter, area, and volume
 - 13. Measure length/distance, time, temperature, weight, mass, and volume
 - 14. Estimate measurements with appropriate precision
 - 15. Identify and use appropriate units of measurement
 - 16. Apply probability concepts and counting rules
 - 17. Understand and apply measures of central tendency and variability
- B. Students can understand and apply methods of estimation.
 - 1. Use standard rounding to estimate
 - 2. Use order of magnitude to estimate
 - 3. Use number sense to estimate
- C. Students can solve a variety of math problems.
 - 1. Solve single-step and multiple-step math problems
 - 2. Identify extraneous or insufficient information in problems
 - 3. Choose a method for solving a problem
- D. Students can interpret data presented in a variety of ways.
 - 1. Read amounts on scales of bar and line graphs
 - 2. Locate amounts in specific cells of a table
 - 3. Compare quantities to determine ranks, sums, or differences and to find ratios
 - 4. Use tables and graphs to determine rates or identify trends, understand underlying or functional relationships, and generalize or draw conclusions

Grade 8 Indicators:

- A. Students can understand and apply a variety of math concepts.
 - 1. Represent, compare, and order numbers
 - 2. Describe and apply properties of numbers
 - 3. Classify numbers by divisibility
 - 4. Demonstrate ways of performing operations
 - 5. Use place value; write numbers in standard, expanded, and exponential form
 - 6. Use and interpret operational and relational symbols
 - 7. Solve equations and inequalities
 - 8. Use variable expressions to model situations
 - 9. Explore numerical patterns

- 10. Identify, classify, and compare geometric figures
- 11. Describe geometric properties, patterns, and relationships
- 12. Apply the concepts of perimeter, area, and volume
- 13. Measure length/distance, time, temperature, weight, mass, and volume
- 14. Estimate measurements with appropriate precision
- 15. Identify and use appropriate units of measurement
- 16. Apply probability concepts and counting rules
- 17. Understand and apply measures of central tendency and variability
- B. Students can understand and apply methods of estimation.
 - 1. Use standard rounding to estimate
 - 2. Use order of magnitude to estimate
 - 3. Use number sense to estimate
- C. Students can solve a variety of math problems.
 - 1. Solve single-step and multiple-step math problems
 - 2. Identify extraneous or insufficient information in problems
 - 3. Choose a method for solving a problem
- D. Students can interpret data presented in a variety of ways.
 - 1. Read amounts on scales of bar and line graphs
 - 2. Locate amounts in specific cells of a table
 - 3. Compare quantities to determine ranks, sums, or differences and to find ratios
 - 4. Use tables and graphs to determine rates or identify trends, understand underlying or functional relationships, and generalize or draw conclusions

Grade 9 Indicators:

- A. Students can understand and apply a variety of math concepts.
 - 1. Understand and apply number properties and operations
 - 2. Understand and apply concepts and procedures of algebra
 - 3. Understand and apply concepts of geometry and measurement
 - 4. Understand and apply concepts in probability and statistics
- B. Students can understand and apply methods of estimation.
 - 1. Understand and apply concepts and procedures of standard rounding, order of magnitude, and number sense
 - 2. Evaluate reasonableness of solutions
- C. Students can solve a variety of math problems.
 - 1. Solve math problems requiring multiple steps and operations
 - 2. Reason quantitatively
- D. Students can interpret data presented in a variety of ways.
 - 1. Make inferences based on data presented in a variety of ways
 - 2. Interpret data from a variety of sources

Grade 10 Indicators:

- A. Students can understand and apply a variety of math concepts.
 - 1. Understand and apply number properties and operations

- 2. Understand and apply concepts and procedures of algebra
- 3. Understand and apply concepts of geometry and measurement
- 4. Understand and apply concepts in probability and statistics
- B. Students can understand and apply methods of estimation.
 - 1. Understand and apply concepts and procedures of standard rounding, order of magnitude, and number sense
 - 2. Evaluate reasonableness of solutions
- C. Students can solve a variety of math problems.
 - 1. Solve math problems requiring multiple steps and operations
 - 2. Reason quantitatively
- D. Students can interpret data presented in a variety of ways.
 - 1. Make inferences based on data presented in a variety of ways
 - 2. Interpret data from a variety of sources

Grade 11 Indicators:

- A. Students can understand and apply a variety of math concepts.
 - 1. Understand and apply number properties and operations
 - 2. Understand and apply concepts and procedures of algebra
 - 3. Understand and apply concepts of geometry and measurement
 - 4. Understand and apply concepts in probability and statistics
- B. Students can understand and apply methods of estimation.
 - 1. Understand and apply concepts and procedures of standard rounding, order of magnitude, and number sense
 - 2. Evaluate reasonableness of solutions
- C. Students can solve a variety of math problems.
 - 1. Solve math problems requiring multiple steps and operations
 - 2. Reason quantitatively
- D. Students can interpret data presented in a variety of ways.
 - 1. Make inferences based on data presented in a variety of ways
 - 2. Interpret data from a variety of sources

Grade 12 Indicators:

- A. Students can understand and apply a variety of math concepts.
 - 1. Understand and apply number properties and operations
 - 2. Understand and apply concepts and procedures of algebra
 - 3. Understand and apply concepts of geometry and measurement
 - 4. Understand and apply concepts in probability and statistics
- B. Students can understand and apply methods of estimation.
 - 1. Understand and apply concepts and procedures of standard rounding, order of magnitude, and number sense
 - 2. Evaluate reasonableness of solutions

- C. Students can solve a variety of math problems.
 - 1. Solve math problems requiring multiple steps and operations
 - 2. Reason quantitatively
- D. Students can interpret data presented in a variety of ways.
 - 1. Make inferences based on data presented in a variety of ways
 - 2. Interpret data from a variety of sources

Science Content Standards:

- A. Students can understand and apply skills used in scientific inquiry.
- B. Students can understand concepts and relationships in life science.
- C. Students can understand concepts and relationships in Earth/space sciences.
- D. Students can understand concepts and relationships in physical science.

Grade 3 Indicators:

- A. Students can understand and apply skills used in scientific inquiry.
 - 1. Understand and apply the processes and skills of investigation
 - 2. Analyze and interpret information from scientific studies
- B. Students can understand concepts and relationships in life science.
 - 1. Understand the structures of living things
 - 2. Describe and understand life cycles
 - 3. Identify and explain the roles of environmental interactions and adaptations
- C. Students can understand concepts and relationships in Earth/space sciences.
 - 1. Describe and understand Earth's composition and structure
 - 2. Identify and explain changes in and around Earth
 - 3. Understand concepts and relationships of the universe
- D. Students can understand concepts and relationships in physical science.
 - 1. Describe and explain concepts related to mechanics, forces, and motion
 - 2. Understand the concept of energy and its various forms
 - 3. Identify and explain the properties and changes of matter

Grade 4 Indicators:

- A. Students can understand and apply skills used in scientific inquiry.
 - 1. Understand and apply the processes and skills of investigation
 - 2. Analyze and interpret information from scientific studies
- B. Students can understand concepts and relationships in life science.
 - 1. Understand the structures of living things
 - 2. Describe and understand life cycles
 - 3. Identify and explain the roles of environmental interactions and adaptations
- C. Students can understand concepts and relationships in Earth/space sciences.
 - 1. Describe and understand Earth's composition and structure
 - 2. Identify and explain changes in and around Earth

- 3. Understand concepts and relationships of the universe
- D. Students can understand concepts and relationships in physical science.
 - 1. Describe and explain concepts related to mechanics, forces, and motion
 - 2. Understand the concept of energy and its various forms
 - 3. Identify and explain the properties and changes of matter

Grade 5 Indicators:

- A. Students can understand and apply skills used in scientific inquiry.
 - 1. Understand and apply the processes and skills of investigation
 - 2. Analyze and interpret information from scientific studies
- B. Students can understand concepts and relationships in life science.
 - 1. Understand the structures of living things
 - 2. Describe and understand life cycles
 - 3. Identify and explain the roles of environmental interactions and adaptations
- C. Students can understand concepts and relationships in Earth/space sciences.
 - 1. Describe and understand Earth's composition and structure
 - 2. Identify and explain changes in and around Earth
 - 3. Understand concepts and relationships of the universe
- D. Students can understand concepts and relationships in physical science.
 - 1. Describe and explain concepts related to mechanics, forces, and motion
 - 2. Understand the concept of energy and its various forms
 - 3. Identify and explain the properties and changes of matter

Grade 6 Indicators:

- A. Students can understand and apply skills used in scientific inquiry.
 - 1. Understand and apply the processes and skills of investigation
 - 2. Analyze and interpret information from scientific studies
- B. Students can understand concepts and relationships in life science.
 - 1. Understand the structures of living things
 - 2. Describe and understand life cycles
 - 3. Identify and explain the roles of environmental interactions and adaptations
- C. Students can understand concepts and relationships in Earth/space sciences.
 - 1. Describe and understand Earth's composition and structure
 - 2. Identify and explain changes in and around Earth
 - 3. Understand concepts and relationships of the universe
- D. Students can understand concepts and relationships in physical science.
 - 1. Describe and explain concepts related to mechanics, forces, and motion
 - 2. Understand the concept of energy and its various forms
 - 3. Identify and explain the properties and changes of matter

Grade 7 Indicators:

- A. Students can understand and apply skills used in scientific inquiry.
 - 1. Understand and apply the processes and skills of investigation
 - 2. Analyze and interpret information from scientific studies
- B. Students can understand concepts and relationships in life science.
 - 1. Understand the structures of living things
 - 2. Describe and understand life cycles
 - 3. Identify and explain the roles of environmental interactions and adaptations
- C. Students can understand concepts and relationships in Earth/space sciences.
 - 1. Describe and understand Earth's composition and structure
 - 2. Identify and explain changes in and around Earth
 - 3. Understand concepts and relationships of the universe
- D. Students can understand concepts and relationships in physical science.
 - 1. Describe and explain concepts related to mechanics, forces, and motion
 - 2. Understand the concept of energy and its various forms
 - 3. Identify and explain the properties and changes of matter

Grade 8 Indicators:

- A. Students can understand and apply skills used in scientific inquiry.
 - 1. Understand and apply the processes and skills of investigation
 - 2. Analyze and interpret information from scientific studies
- B. Students can understand concepts and relationships in life science.
 - 1. Understand the structures of living things
 - 2. Describe and understand life cycles
 - 3. Identify and explain the roles of environmental interactions and adaptations
- C. Students can understand concepts and relationships in Earth/space sciences.
 - 1. Describe and understand Earth's composition and structure
 - 2. Identify and explain changes in and around Earth
 - 3. Understand concepts and relationships of the universe
- D. Students can understand concepts and relationships in physical science.
 - 1. Describe and explain concepts related to mechanics, forces, and motion
 - 2. Understand the concept of energy and its various forms
 - 3. Identify and explain the properties and changes of matter

Grade 9 Indicators:

- A. Students can understand and apply skills used in scientific inquiry.
 - 1. Understand and apply the processes and skills of scientific inquiry
 - 2. Analyze and interpret scientific information
- B. Students can understand concepts and relationships in biological science.
 - 1. Make inferences and predictions using fundamental biological concepts

- 2. Analyze biological investigations
- 3. Analyze and evaluate the adequacy and accuracy of biological information
- C. Students can understand concepts and relationships in Earth/space sciences.
 - 1. Make inferences and predictions using fundamental Earth/space concepts
 - 2. Analyze Earth/space investigations
 - 3. Analyze and evaluate the adequacy and accuracy of Earth/space information
- D. Student can understand concepts and relationships in physical science.
 - 1. Make inferences and predictions using fundamental physical science concepts
 - 2. Analyze physical science investigations
 - 3. Analyze and evaluate the adequacy and accuracy of physical science information

Grade 10 Indicators:

- A. Students can understand and apply skills used in scientific inquiry.
 - 1. Understand and apply the processes and skills of scientific inquiry
 - 2. Analyze and interpret scientific information
- B. Students can understand concepts and relationships in biological science.
 - 1. Make inferences and predictions using fundamental biological concepts
 - 2. Analyze biological investigations
 - 3. Analyze and evaluate the adequacy and accuracy of biological information
- C. Students can understand concepts and relationships in Earth/space sciences.
 - 1. Make inferences and predictions using fundamental Earth/space concepts
 - 2. Analyze Earth/space investigations
 - 3. Analyze and evaluate the adequacy and accuracy of Earth/space information
- D. Student can understand concepts and relationships in physical science.
 - 1. Make inferences and predictions using fundamental physical science concepts
 - 2. Analyze physical science investigations
 - 3. Analyze and evaluate the adequacy and accuracy of physical science information

Grade 11 Indicators:

- A. Students can understand and apply skills used in scientific inquiry.
 - 1. Understand and apply the processes and skills of scientific inquiry
 - 2. Analyze and interpret scientific information
- B. Students can understand concepts and relationships in biological science.
 - 1. Make inferences and predictions using fundamental biological concepts
 - 2. Analyze biological investigations
 - 3. Analyze and evaluate the adequacy and accuracy of biological information
- C. Students can understand concepts and relationships in Earth/space sciences.
 - 1. Make inferences and predictions using fundamental Earth/space concepts
 - 2. Analyze Earth/space investigations
 - 3. Analyze and evaluate the adequacy and accuracy of Earth/space information

- D. Student can understand concepts and relationships in physical science.
 - 1. Make inferences and predictions using fundamental physical science concepts
 - 2. Analyze physical science investigations
 - 3. Analyze and evaluate the adequacy and accuracy of physical science information

Grade 12 Indicators:

- A. Students can understand and apply skills used in scientific inquiry.
 - 1. Understand and apply the processes and skills of scientific inquiry
 - 2. Analyze and interpret scientific information
- B. Students can understand concepts and relationships in biological science.
 - 1. Make inferences and predictions using fundamental biological concepts
 - 2. Analyze biological investigations
 - 3. Analyze and evaluate the adequacy and accuracy of biological information
- C. Students can understand concepts and relationships in Earth/space sciences.
 - 1. Make inferences and predictions using fundamental Earth/space concepts
 - 2. Analyze Earth/space investigations
 - 3. Analyze and evaluate the adequacy and accuracy of Earth/space information
- D. Student can understand concepts and relationships in physical science.
 - 1. Make inferences and predictions using fundamental physical science concepts
 - 2. Analyze physical science investigations
 - 3. Analyze and evaluate the adequacy and accuracy of physical science information

Appendix E: Performance/Proficiency Descriptors Used in Iowa in Reading, Mathematics, and Science

The Achievement Levels Report for the ITBS and ITED is provided to Iowa schools to help describe the level of performance of student groups and monitor the progress of groups over time. For each of the three main achievement levels—Low, Intermediate, and High—descriptors are included on the report to identify what the typical student in each level is able to do. For accountability purposes, the Iowa Department of Education has combined the Intermediate and High performance levels to define a single achievement level called "Proficient." This document was prepared to explain how the descriptors for the "Proficient" level of performance were derived and how they should be interpreted.

The method for developing these descriptors was the same benchmarking approach that was used initially to create the descriptors for the Achievement Levels Report. (Details can be found in the leaflet, "Interpretive Guide for the Achievement Levels Report, 2003 Version," which is available as a downloadable document from the lowa Testing Programs website.)

An achievement level descriptor tells what the typical student in a score range knows or is able to do relative to the content measured by the test. Because those who perform at a higher level within the range can probably do more and those who perform at a lower level within the range can do less, achievement level descriptors should not be used to describe what individual students can do. That is, descriptors are intended to show what group performance is like within a range on an achievement continuum. Individuals who are classified within the same achievement level are likely to vary from one another extensively, more so when the range encompassed by the achievement level is wide. For example, those within the range 41-99 should be expected to differ from one another much more than those within the range 76-99.

When used to label an achievement level, the term "Proficient" embodies a performance standard. It is a term that connotes sufficiency of performance—achievement that is regarded as "good enough." Achievement level labels such as "Low", "Intermediate", and "High" are merely descriptive without conveying a judgment about sufficiency. However, the term Proficient describes and indicates that the level of performance is acceptable or minimally sufficient for some circumstance or purpose. In the current accountability context, Proficient and Less-than-Proficient are labels being used to describe the performance of groups that are at or above an acceptable standard or below that standard, respectively. That standard is determined by the test score user—the lowa Department of Education in this case. In this accountability context, these descriptors should help schools interpret the concept of proficiency and convey the appropriate meaning in their public reporting of achievement data.

Performance Level Descriptors Grade 4 Reading Comprehension

High Performance Level: Understands factual information and new words in context, is able to make inferences, can interpret either non-literal language or information in new contexts, and can determine a selection's main ideas and analyze its style and structure.

Distinguished: Understands factual information and new words in context. Can make inferences and interpret either non-literal language or information in new contexts. Can determine a selection's main ideas and analyze its style and structure.

Accomplished: Usually understands factual information and new words in context. Usually can make inferences and interpret either non-literal language or information in new contexts. Can determine a selection's main ideas and analyze its style and structure.

Intermediate Performance Level: Usually understands factual information and new words in context. Usually is able to make inferences and interpret either non-literal language or information in new contexts. Often can determine a selection's main ideas and analyze its style and structure.

Skilled: Usually understands factual information and new words in context. Often can make inferences and interpret either non-literal language or information in new contexts. Can determine a selection's main ideas and analyze its style and structure.

Moderate: Usually understands factual information and new words in context. Sometimes is able to make inferences and interpret either non-literal language or information in new contexts. Usually can determine a selection's main ideas and analyze its style and structure.

Low Performance Level: Seldom understands factual information or new words in context. Sometimes is able to make inferences and interpret either non-literal language or information in new contexts. Rarely can determine a selection's main ideas or analyze its style and structure.

Marginal: Seldom understands factual information or new words in context. Sometimes is able to make inferences and interpret either non-literal language or information in new contexts. Sometimes can determine a selection's main ideas and analyze its style and structure.

Weak: Seldom understands factual information or new words in context. Rarely is able to make inferences or to interpret either non-literal language or information in new contexts. Seldom can determine a selection's main ideas or analyze aspects of its style and structure

Performance Level Descriptors Grade 8 Reading Comprehension

High Performance Level: When using grade-appropriate texts, a student who performs at this level understands factual information and new words in context, is able to make inferences, and can interpret information in new contexts. The student also can determine a selection's main ideas, identify its author's purpose or viewpoint, and analyze its style and structure.

Distinguished: Understands factual information and new words in context, and can make inferences and interpret information in new contexts. Is able to determine a selection's main ideas and analyze its style and structure. Can identify author purpose or viewpoint.

Accomplished: Usually understands factual information and new words in context, can make inferences and interpret information in new contexts, and is able to determine a selection's main ideas and analyze its style and structure. Can identify author purpose or viewpoint.

Intermediate Performance Level: When using grade-appropriate texts, a student who performs at this level usually understands factual information and new words in context. Often is able to make inferences and interpret information in new contexts. The student can sometimes determine a selection's main ideas, identify its author's purpose or viewpoint, and analyze its style and structure.

Skilled: Usually understands factual information and new words in context. Can make inferences and interpret information in new contexts. Usually can determine a selection's main ideas and analyze its style and structure. Usually is able to identify author purpose or viewpoint.

Moderate: Usually understands factual information and new words in context. Often is able to make inferences and interpret information in new contexts. Sometimes can determine a selection's main ideas and analyze its style and structure. Sometimes can identify author purpose or viewpoint.

Low Performance Level: When using grade-appropriate texts, a student who performs at this level seldom understands factual information or new words in context. The student rarely is able to make inferences or interpret information in new contexts. The student can seldom determine a selection's main ideas, identify its author's purpose or viewpoint, or analyze its style and structure.

Marginal: Seldom understands factual information or new words in context. Sometimes is able to make inferences and interpret information in new contexts. Sometimes can determine a selection's main ideas and analyze its style and structure. Sometimes is able to identify author purpose or viewpoint.

Weak: Seldom understands factual information or new words in context. Rarely is able to make inferences and interpret information in new contexts. Seldom can

determine a selection's main ideas or analyze its style and structure. Rarely can identify author purpose or viewpoint.

Performance Level Descriptors Grade 11 Reading Comprehension

High Performance Level: Understands stated information and ideas; infers implied meaning, draws conclusions, and interprets non-literal language; and makes generalizations from or about a text, identifies its author's purpose or viewpoint, and evaluates aspects of its style or structure.

Distinguished: Understands stated information and ideas; makes inferences about implied meanings, draws conclusions, and interprets non-literal language; and makes generalizations from or about a text, identifies its author's purpose or viewpoint, and evaluates aspects of its style or structure.

Accomplished: Usually understands stated information and ideas; makes inferences about implied meanings, draws conclusions, and interprets non-literal language; and usually makes generalizations from or about a text, identifies its author's purpose or viewpoint, and evaluates aspects of its style or structure.

Intermediate Performance Level: Sometimes understands stated information and ideas; sometimes infers implied meaning, draws conclusions, and interprets non-literal language; and sometimes makes generalizations from or about a text, identifies its author's purpose or viewpoint, and evaluates aspects of its style or structure.

Skilled: Usually understands stated information and ideas; usually makes inferences about implied meanings, draws conclusions, and interprets non-literal language; and often makes generalizations from or about a text, identifies its author's purpose or viewpoint, and evaluates aspects of its style or structure.

Moderate: Sometimes understands stated information and ideas; sometimes makes simple inferences about implied meaning, draws conclusions, and interprets non-literal language; and sometimes makes generalizations from or about a text, identifies its author's purpose or viewpoint, and evaluates aspects of its style or structure.

Low Performance Level: Seldom understands stated information and ideas; rarely infers implied meaning, draws conclusions, or interprets non-literal language; and rarely makes generalizations from or about a text, identifies its author's purpose or viewpoint, or evaluates aspects of its style or structure.

Marginal: Seldom understands stated information and ideas; rarely makes inferences about implied meaning or interprets non-literal language; and rarely makes generalizations from or about a text, identifies its author's purpose or viewpoint, or evaluates aspects of its style or structure.

Weak: Rarely understands stated information and ideas; rarely makes inferences about implied meaning or interprets non-literal language; and does not make generalizations from or about a text, identify its author's purpose or viewpoint, or evaluate aspects of its style or structure.

Performance Level Descriptors Grade 4 Mathematics

High Performance Level: Understands math concepts, solves word problems, and often is able to use estimation methods. Can interpret data from graphs and tables.

Distinguished: Understands math concepts and is able to solve word problems.

use estimation methods and interpret data from graphs and tables.

Accomplished: Usually can understand math concepts and solve word problems. Often can use estimation methods and interpret data from graphs and tables.

Intermediate Performance Level: Usually can understand math concepts and solve word problems. Sometimes is able to use estimation methods and usually can interpret data from graphs and tables.

Skilled: Sometimes can understand math concepts and usually is able to solve word

problems. Often can use estimation methods and interpret data from graphs and tables.

Moderate: Sometimes can understand math concepts and solve word problems. Sometimes is able to use estimation methods and interpret data from graphs and tables.

Low Performance Level: Sometimes can understand math concepts, but seldom is able to solve word problems. Rarely is able to use estimation methods or interpret data from graphs and tables.

Marginal: Sometimes can understand math concepts but seldom is able to solve word problems or use estimation methods. Sometimes can interpret data from graphs and tables.

Weak: Seldom can understand math concepts or solve word problems. Rarely can use estimation methods or interpret data from graphs and tables.

Performance Level Descriptors Grade 8 Mathematics

High Performance Level: A student who performs at this level understands math concepts and is able to solve word problems. The student usually can use estimation methods. The student is able to interpret data from graphs and tables.

Distinguished: Understands math concepts and is able to solve word problems. Usually can use estimation methods. Is able to interpret data from graphs and tables.

Accomplished: Understands math concepts and is able to solve word problems. Usually can use estimation methods. Is able to interpret data from graphs and tables.

Intermediate Performance Level: A student who performs at this level usually can understand math concepts and sometimes is able to solve word problems. The student sometimes is able to use estimation methods and usually is able to interpret data from graphs and tables.

Skilled: Understands math concepts and usually is able to solve word problems. Often can use estimation methods and interpret data from graphs and tables.

Moderate: Usually can understand math concepts and sometimes is able to solve word problems. Sometimes can use estimation methods and interpret data from graphs and tables.

Low Performance Level: A student who performs at this level seldom can understand math concepts or solve word problems. The student rarely can use estimation methods or interpret data from graphs or tables.

Marginal: Sometimes can understand math concepts but seldom is able to solve word problems. Sometimes can use estimation methods and interpret data from graphs and tables.

Weak: Seldom can understand math concepts or solve word problems. Rarely can use estimation methods or interpret data from graphs and tables.

Performance Level Descriptors Grade 11 Mathematics

High Performance Level: Makes inferences with quantitative information and solves a variety quantitative reasoning problems; usually applies math concepts and procedures.

Distinguished: Applies math concepts and procedures, makes inferences with quantitative information, and solves a variety of quantitative reasoning problems.

Accomplished: Usually applies math concepts and procedures, makes inferences quantitative information, and solves a variety of quantitative reasoning problems.

Intermediate Performance Level: Sometimes applies math concepts and procedures, makes inferences with quantitative information, and solves a variety of quantitative reasoning problems.

Skilled: Sometimes applies math concepts and procedures, often makes inferences quantitative information and solves a variety of quantitative reasoning problems.

Moderate: Sometimes applies math concepts and procedures, makes inferences about quantitative information, and solves a variety of quantitative reasoning problems.

Low Performance Level: Seldom applies math concepts and procedures, makes inferences quantitative information, or solves quantitative reasoning problems.

Marginal: Seldom applies math concepts and procedures, makes inferences with quantitative information, or solves quantitative reasoning problems.

Weak: Rarely applies math concepts and procedures, makes inferences with quantitative information, or solves quantitative reasoning problems.

Appendix F: Sample Model Core Curriculum Lesson

In Reading:

Illustration of Uses a variety of skills and strategies to comprehend complex nonfiction and informational text in the International Center for Leadership in Education (ICLE) Rigor and Relevance Framework

Quadrant C

Students locate and read a multiple sources of information about a topic related to genetic engineering. Students listen to a lecture by a genetic engineer employed by a local seed corn company about implications of genetic engineering on corn. Then they develop hypotheses and a plan to prove or disprove the hypothesis using research. Students write an evaluative, annotated bibliography and research paper assessing hypotheses and posing proposals for refined research.

Quadrant D

Students research national and world nutrition/food problems in collaborative groups. Students predict potential crises and pose solutions to these problems that could occur through genetic engineering of food products. Students present research information, hypothesis, and solutions through a multi-media presentation to a knowledgeable and critical audience. Students defend their proposals through answering questions posed by audience members.

Quadrant A

Students read a chapter from a biology textbook about genetics and genetic engineering and write a five-sentence summary of what they've read. The teacher identifies key vocabulary words in the text and students use context clues or other resources to write definitions of the words.

Quadrant B

After reading a chapter from a biology textbook about genetics and genetic engineering, students examine varieties of ears of corn from the Farmer's Market. Students group samples into categories and define the characteristics of the categories. Students interpret differences in corn samples based on information from the textbook.

In Mathematics:

Illustration of Understands, analyzes, solves, and applies equations and inequalities in the ICLE's Rigor and Relevance Framework

Quadrant C

Solve this equation:

13 = 0.10(x-200) + 5

Use different methods and different representations (including tables, graphs, analytical methods, symbolic reasoning, using technology, etc.). Analyze and evaluate each method and representation, including advantages and disadvantages of different methods and representations.

Quadrant D

Research some text-messaging plans available in your area. Find a mathematical model that represents each plan. Given your text-messaging habits and the mathematical models, evaluate these plans, and choose the one that is best for you. Explain your choice and why you think it's the best plan for you.

Quadrant A

Solve this equation:

13 = 0.10(x-200) + 5

Describe the process you used to solve the equation. Check your solution and explain what the solution means in terms of the equation.

Quadrant B

Consider this text messaging plan for your cell phone: You pay \$5 per month for 200 text messages, then you are charged \$0.10 for each additional message either sent or received. Find an equation that models this text-messaging plan. Use your equation to determine how many text messages you can send or receive in a month if you are willing to spend \$13 that month on text messages.

In Science:

Illustration of Understands and applies knowledge of energy in the earth system in the ICLE's Rigor and Relevance Framework

Quadrant C

Students are asked to write an explanation of why earthquakes and volcanic eruptions tend to "cluster" in certain belts and areas of the Earth's crust and not in others. Use your knowledge of convection in the crust and plate tectonics to predict where such disasters might affect North and Central America.

Quadrant D Adaptation (D)

At least two major disasters have occurred recently (2004-2005) that were caused by the movement of the earth's plates. Students are asked to respond to the following questions regarding these two disasters: Where were these located? How were their causes alike and different? How could these disasters be better predicted, both in scope and location? What recommendations would you provide to government and relief agencies in order for them to be better prepared to serve people's needs before and after such emergencies?

Quadrant A

Students are asked to build a model, using different colors of clay, to demonstrate earth plates and plate tectonic movements.

Quadrant B

Students are asked to create sketches on a black or white board to describe how convection currents in the mantle drive the movements of tectonic plates on the surface. Use a large beaker of boiling water to help illustrate your sketches if you need.

*Evidence, Models and Explanation

*Evidence, Models and Explanation

^{*}Unifying Concept (NSES) represented in this activity. Unifying concepts cross curricular areas and provide students with productive and insightful ways of thinking about and integrating basic ideas that explain the natural and designed world.

Appendix G: Partnership for 21st Century Skills

The Partnership for 21st Century Skills is a unique organization bringing together the business community, education leaders and policymakers to define a powerful vision for 21st century education and to provide tools and resources to help facilitate and drive change toward 21st century skills. The Partnership for 21st Century Skills includes an impressive list of member organizations including Apple, Cisco Systems, Inc., Dell Inc., Ford Motor Company, McGraw-Hill Education, Microsoft Corporation, National Education Association, Time Warner Inc., and Verizon. The Partnership has developed a unified, collective vision for 21st century learning that can be used to strengthen American public schools. This vision is the result of a sustained, comprehensive effort to create a shared understanding and common language for education.

To develop the vision, the Partnership conducted extensive research on 21st century skills, sponsored a National Forum on 21st Century Skills and held outreach sessions with educators, employers, parents, community members and students. In the course of this multiyear process, thousands of key stakeholders and citizens across the country have contributed their insights about the results that matter. There is strong support for infusing 21st century skills into education. This is the kind of dynamic instruction that initially attracted most educators to the field. The Partnership has identified six key elements of 21st century learning:

- 1. Core subjects. No Child Left Behind Act of 2001, which reauthorizes the Elementary and Secondary Education Act of 1965, identifies the core subjects as English, reading or language arts; mathematics; science; foreign languages; civics; government; economics; arts; history; and geography.
- 2. 21st century content. Several significant, emerging content areas are critical to success in communities and workplaces. These content areas typically are not emphasized in schools today:
 - Global awareness
 - Financial, economic, business and entrepreneurial literacy
 - Civic literacy
 - Health and wellness awareness
- 3. Learning and thinking skills. As much as students need to learn academic content, they also need to know how to keep learning and make effective and innovative use of what they know throughout their lives. Learning and thinking skills are comprised of:
 - · Critical-thinking and problem-solving skills
 - Communication skills
 - Creativity and innovation skills
 - Collaboration skills
 - Contextual learning skills
 - Information and media literacy skills
- 4. Information and communication technology (ICT) literacy is the ability to use technology to develop 21st century content knowledge and skills, in the context of learning core subjects. Students must be able to use technology to learn content and skills — so that they know how to learn, think critically, solve problems, use information, communicate, innovate and collaborate.

Page 89

- 5. Life skills. Good teachers have always incorporated life skills into their pedagogy. The challenge today is to incorporate these essential skills into schools deliberately, strategically and broadly. Life skills include:
 - Leadership
 - Ethics
 - Accountability
 - Adaptability
 - Personal productivity
 - Personal responsibility
 - People skills
 - Self-direction
 - Social responsibility
- 6. 21st century assessments. Authentic 21st century assessments are the essential foundation of a 21st century education. Assessments must measure all five results that matter core subjects; 21st century content; learning and thinking skills; ICT literacy; and life skills. Assessment of 21st century skills should be integrated with assessments of core subjects. Separate assessments would defeat the purpose of infusing 21st century skills into core subjects. To be effective, sustainable and affordable, assessments must use modern technologies to increase efficiency and timeliness. Standardized tests alone can measure only a few of the important skills and knowledge students should learn. A balance of assessments, including high-quality standardized testing along with effective classroom assessments, offers students and teachers a powerful tool to master the content and skills central to success.

Additional information on the 21st Century Skills Project is available at: http://www.21stcenturyskills.org/.

Appendix H: CHAPTER 284 TEACHER PERFORMANCE, COMPENSATION, AND CAREER DEVELOPMENT

Legislative intent; 2001 Acts, ch 161, §1

284.1 STUDENT ACHIEVEMENT AND TEACHER QUALITY PROGRAM.

A student achievement and teacher quality program is established to promote high student achievement. The program shall consist of the following four major elements:

- 1. Mentoring and induction programs that provide support for beginning teachers in accordance with section 284.5.
- 2. Career paths with compensation levels that strengthen lowa's ability to recruit and retain teachers.
 - 3. Professional development designed to directly support best teaching practices.
- 4. Team-based variable pay that provides additional compensation when student performance improves.

2001 Acts, ch 161, §2

284.2 DEFINITIONS.

As used in this chapter, unless the context otherwise requires:

- 1. "Beginning teacher" means an individual serving under an initial license, issued by the board of educational examiners under chapter 272, who is assuming a position as a classroom teacher. For purposes of the beginning teacher mentoring and induction program created pursuant to section 284.5, "beginning teacher" also includes preschool teachers who are licensed by the board of educational examiners under chapter 272 and are employed by a school district or area education agency.
- 2. "Classroom teacher" means an individual who holds a valid practitioner's license and who is employed under a contract issued by a board of directors under section 279.13 to provide classroom instruction to students, or as a preschool teacher.
- 3. "Comprehensive evaluation" means a summative evaluation of a beginning teacher conducted by an evaluator for purposes of determining a beginning teacher's level of competency, for recommendation for licensure based upon the lowa teaching standards, and to determine whether the teacher's practice meets the school district expectations for a career teacher.
 - 4. "Department" means the department of education.
 - 5. "Director" means the director of the department of education.
- 6. "Evaluator" means an administrator or other practitioner who successfully completes an evaluator training program pursuant to section 284.10.
- 7. "Intensive assistance" means the provision of organizational support and technical assistance to teachers, other than beginning teachers, for the remediation of identified teaching and classroom management concerns for a period not to exceed twelve months.
- 8. "Mentor" means an individual employed by a school district or area education agency as a classroom teacher or a retired teacher who holds a valid license issued under chapter 272. The individual must have a record of four years of successful teaching practice, must be employed on a nonprobationary basis, and must demonstrate

professional commitment to both the improvement of teaching and learning and the development of beginning teachers.

- 9. "Performance review" means a summative evaluation of a teacher other than a beginning teacher and used to determine whether the teacher's practice meets school district expectations and the lowa teaching standards, and to determine whether the teacher's practice meets school district expectations for career advancement in accordance with section 284.7.
- 10. "School board" means the board of directors of a school district or a collaboration of boards of directors of school districts.
 - 11. "State board" means the state board of education.
- 12. "Teacher" means an individual holding a practitioner's license issued under chapter 272, who is employed in a nonadministrative position as a teacher, librarian, media specialist, preschool teacher, or counselor by a school district or area education agency pursuant to a contract issued by a board of directors under section 279.13. A teacher may be employed in both an administrative and a nonadministrative position by a board of directors and shall be considered a part-time teacher for the portion of time that the teacher is employed in a nonadministrative position. "Teacher" includes a licensed individual employed on a less than full-time basis by a school district through a contract between the school district and an institution of higher education with a practitioner preparation program in which the licensed teacher is enrolled.

2001 Acts, ch 161, §3; 2002 Acts, ch 1152, §7, 8; 2003 Acts, ch 180, §37 284.3 IOWA TEACHING STANDARDS.

- 1. For purposes of this chapter and for developing teacher evaluation criteria under chapter 279, the lowa teaching standards are as follows:
- a. Demonstrates ability to enhance academic performance and support for and implementation of the school district's student achievement goals.
- b. Demonstrates competence in content knowledge appropriate to the teaching position.
 - c. Demonstrates competence in planning and preparing for instruction.
- d. Uses strategies to deliver instruction that meets the multiple learning needs of students.
 - e. Uses a variety of methods to monitor student learning.
 - f. Demonstrates competence in classroom management.
 - g. Engages in professional growth.
 - h. Fulfills professional responsibilities established by the school district.
 - 2. A school board shall provide for the following:
- a. For purposes of comprehensive evaluations for beginning teachers required to allow beginning teachers to progress to career teachers, standards and criteria that are the lowa teaching standards specified in subsection 1 and the criteria for the lowa teaching standards developed by the department in accordance with section 256.9, subsection 50. These standards and criteria shall be set forth in an instrument provided by the department. The comprehensive evaluation and instrument are not subject to negotiations or grievance procedures pursuant to chapter 20 or determinations made by the board of directors under section 279.14. A local school board and its certified bargaining representative may negotiate, pursuant to chapter 20, evaluation and grievance procedures for beginning teachers that are not in conflict with this chapter. If, in accordance with section 279.19, a beginning teacher appeals the determination of a school board to an adjudicator under section 279.17, the adjudicator selected shall have successfully completed training related to the lowa teacher standards, the criteria adopted by the state board of education in accordance with subsection 3, and any

additional training required under rules adopted by the public employment relations board in cooperation with the state board of education.

b. By July 1, 2005, for purposes of performance reviews for teachers other than beginning teachers, evaluations that contain, at

a minimum, the lowa teaching standards specified in subsection 1, as well as the criteria for the lowa teaching standards developed by the department in accordance with section 256.9, subsection 50. A local school board and its certified bargaining representative may negotiate, pursuant to chapter 20, additional teaching standards and criteria. A local school board and its certified bargaining representative may negotiate, pursuant to chapter 20, evaluation and grievance procedures for teachers other than beginning teachers that are not in conflict with this chapter.

3. The state board shall adopt by rule pursuant to chapter 17A the criteria developed by the department in accordance with section 256.9, subsection 50.

2001 Acts, ch 161, §4; 2002 Acts, ch 1152, §9, 10; 2003 Acts, ch 108, §49; 2003 Acts, ch 180, §38, 39

Referred to in § 284.8

284.4 PARTICIPATION.

- 1. A school district is eligible to receive moneys appropriated for purposes specified in this chapter if the school board applies to the department to participate in the student achievement and teacher quality program and submits a written statement declaring the school district's willingness to do all of the following:
- a. Commit and expend local moneys to improve student achievement and teacher quality.
- b. Implement a beginning teacher mentoring and induction program as provided in this chapter.
- c. Provide, beginning in the fifth year of participation, the equivalent of one additional contract day, outside of instruction time, than was provided in the school year preceding the first year of participation, to provide additional time for teacher career development that aligns with student learning and teacher development needs, including the integration of technology into curriculum development, in order to achieve attendance center and district-wide student achievement goals outlined in the district comprehensive school improvement plan. School districts are encouraged to develop strategies for restructuring the school calendar to provide for the most effective professional development, evaluate their current career development alignment with their student achievement goals and research-based instructional strategies, and implement district career development plans. A school district that provides the equivalent of ten or more contract days for career development is exempt from this paragraph.
- d. Adopt district and teacher career development plans in accordance with this chapter.
- e. Adopt a teacher evaluation plan that, at minimum, requires a performance review of teachers in the participating district at least once every three years based upon the lowa teaching standards and individual career development plans, and requires administrators to

complete evaluator training in accordance with section 284.10.

- f. Adopt teacher career paths based upon demonstrated knowledge and skills in accordance with this chapter.
- g. Adopt a team-based variable pay plan that rewards attendance center success upon the implementation of a statewide variable pay plan.
- 2. By July 1, 2002, each school district shall participate in the student achievement and teacher quality program if the general assembly appropriates moneys for purposes of the student achievement and teacher quality program established pursuant to this chapter. 2001 Acts, ch 161, §5; 2001 Acts, ch 177, §3, 15; 2002 Acts, ch

1152, §11, 12; 2003 Acts, ch 180, §40; 2005 Acts, ch 169, §29 Referred to in § 284.5, 284.7

284.5 BEGINNING TEACHER MENTORING AND INDUCTION PROGRAM.

- 1. A beginning teacher mentoring and induction program is created to promote excellence in teaching, enhance student achievement, build a supportive environment within school districts and area education agencies, increase the retention of promising beginning teachers, and promote the personal and professional well-being of classroom teachers.
 - 2. The state board shall adopt rules to administer this section.
- 3. Each school district and area education agency shall provide a beginning teacher mentoring and induction program for all classroom teachers who are beginning teachers, and notwithstanding section 284.4, subsection 1, a school district and an area education agency shall be eligible to receive moneys under section 284.13, subsection 1, paragraph "b", for purposes of implementing a beginning teacher mentoring and induction program in accordance with this section.
- 4. Each participating school district and area education agency shall develop an initial beginning teacher mentoring and induction plan. A school district shall include its plan in the school district's comprehensive school improvement plan submitted pursuant to section 256.7, subsection 21. The beginning teacher mentoring and induction plan shall, at a minimum, provide for a two-year sequence of induction program content and activities to support the lowa teaching standards and beginning teacher professional and personal needs; mentor training that includes, at a minimum, skills of classroom demonstration and coaching, and district expectations for beginning teacher competence on lowa teaching standards; placement of mentors and beginning teachers; the process for dissolving mentor and beginning teacher partnerships; district organizational support for release time for mentors and beginning teachers to plan, provide demonstration of classroom practices, observe teaching, and provide feedback; structure for mentor selection and assignment of mentors to beginning teachers; a district facilitator; and program evaluation.
- 5. A beginning teacher shall be informed by the school district or the area education agency, prior to the beginning teacher's participation in a mentoring and induction program, of the criteria upon which the beginning teacher shall be evaluated and of the evaluation process utilized by the school district or area education agency.

- 6. Upon completion of the program, the beginning teacher shall be comprehensively evaluated to determine if the teacher meets expectations to move to the career level. The school district or area education agency that employs the beginning teacher shall recommend for a standard license a beginning teacher who is determined through a comprehensive evaluation to demonstrate competence in the lowa teaching standards. A school district or area education agency may offer a beginning teacher a third year of participation in the program if, after conducting a comprehensive evaluation, the school district determines that the teacher is likely to successfully complete the mentoring and induction program by the end of the third year of eligibility. A teacher granted a third year of eligibility shall develop a teacher's mentoring and induction program plan in accordance with this chapter and shall undergo a comprehensive evaluation at the end of the third year. The board of educational examiners shall grant a one-year extension of the beginning teacher's initial license upon notification by the school district that the teacher will participate in a third year of the school district's program.
- 7. If a beginning teacher who is participating in a mentoring and induction program leaves the employ of a participating school district or area education agency prior to completion of the program, the participating school district or area education agency subsequently hiring the beginning teacher shall credit the beginning teacher with the time earned in the program prior to the subsequent hiring.
- 8. If the general assembly appropriates moneys for purposes of this section, a school district or area education agency is eligible to receive state assistance for up to two years under this section for each teacher the school district or area education agency employs who was formerly employed in an accredited nonpublic school or in another state as a first-year teacher. The school district or area education agency employing the teacher shall determine the conditions and requirements of a teacher participating in a program in accordance with this subsection. The school district or area education agency that employs the teacher shall recommend the teacher for an educational license if the teacher, through a comprehensive evaluation, is determined to demonstrate competence in the lowa teaching standards.

2001 Acts, ch 161, §6; 2001 Acts, ch 177, §4, 15; 2002 Acts, ch 152, §13; 2003 Acts, ch 180, §41; 2003 Acts, ch 182, §15 Referred to in § 284.1, 284.2

284.6 TEACHER CAREER DEVELOPMENT.

- 1. The department shall coordinate a statewide network of career development for lowa teachers. A participating school district or career development provider that offers a career development program in accordance with section 256.9, subsection 50, shall demonstrate that the program contains the following:
- a. Support that meets the career development needs of individual teachers and is aligned with the lowa teaching standards.
 - b. Research-based instructional strategies aligned with the

school district's student achievement needs and the long-range improvement goals established by the district.

- c. Instructional improvement components including student achievement data, analysis, theory, classroom demonstration and practice, technology integration, observation, reflection, and peer coaching.
- d. An evaluation component that documents the improvement in instructional practice and the effect on student learning.
- 2. The department shall identify models of career development practices that produce evidence of the link between teacher training and improved student learning.
- 3. A participating school district shall incorporate a district career development plan into the district's comprehensive school improvement plan submitted to the department in accordance with section 256.7, subsection 21. The district career development plan shall include a description of the means by which the school district will provide access to all teachers in the district to career development programs or offerings that meet the requirements of subsection 1. The plan shall align all career development with the school district's long-range student learning goals and the lowa teaching standards. The plan shall indicate the school district's approved career development provider or providers.
- 4. In cooperation with the teacher's evaluator, the career teacher employed by a participating school district shall develop an individual teacher career development plan. The evaluator shall consult with the teacher's supervisor on the development of the individual teacher career development plan. The purpose of the plan is to promote individual and group career development. The individual plan shall be based, at minimum, on the needs of the teacher, the lowa teaching standards, and the student achievement goals of the attendance center and the school district as outlined in the comprehensive school improvement plan.
- 5. The teacher's evaluator shall annually meet with the teacher to review progress in meeting the goals in the teacher's individual plan. The teacher shall present to the evaluator evidence of progress. The purpose of the meeting shall be to review the teacher's progress in meeting career development goals in the plan and to review collaborative work with other staff on student achievement goals and to modify as necessary the teacher's individual plan to reflect the individual teacher's and the school district's needs and the individual's progress in meeting the goals in the plan. The teacher's supervisor and the evaluator shall review, modify, or accept modifications made to the teacher's individual plan.
- 6. School districts, a consortium of school districts, area education agencies, higher education institutions, and other public or private entities including professional associations may be approved by the state board to provide teacher career development. The career development program or offering shall, at minimum, meet the requirements of subsection 1. The state board shall adopt rules for the approval of career development providers and standards for the district career development plan.

2001 Acts, ch 161, §7; 2002 Acts, ch 1152, §14; 2003 Acts, ch 180, §42

Referred to in § 256.7, 284.13 284.7 IOWA TEACHER CAREER PATH.

To promote continuous improvement in lowa's quality teaching workforce and to give lowa teachers the opportunity for career recognition that reflects the various roles teachers play as educational leaders, an lowa teacher career path is established for teachers employed by participating school districts. A participating school district shall use funding allocated under section 284.13, subsection 1, paragraph "d", to raise teacher salaries to meet the requirements of this section. The lowa teacher career path and salary minimums are as follows:

- 1. Effective July 1, 2001, the following career path levels are established and shall be implemented in accordance with this chapter:
 - a. Beginning teacher.
- (1) A beginning teacher is a teacher who meets the following requirements:
- (a) Has successfully completed an approved practitioner preparation program as defined in section 272.1.
- (b) Holds an initial teacher license issued by the board of educational examiners.
- (c) Participates in the beginning teacher mentoring and induction program as provided in this chapter.
- (2) The participating district shall increase the district's minimum salary for a first-year beginning teacher by at least one thousand five hundred dollars per year above the minimum salary paid to a first-year beginning teacher in the previous year unless the minimum salary for a first-year beginning teacher exceeds twenty-eight thousand dollars.
 - b. Career teacher.
- (1) A career teacher is a teacher who meets the following requirements:
- (a) Has successfully completed the beginning teacher mentoring and induction program and has successfully completed a comprehensive evaluation as provided in this chapter.
- (b) Is reviewed by the school district as demonstrating the competencies of a career teacher.
- (c) Holds a valid license issued by the board of educational examiners.
- (d) Participates in teacher career development as set forth in this chapter and demonstrates continuous improvement in teaching.
- (2) The participating district shall provide a two thousand dollar difference between the average beginning teacher salary and the minimum career teacher salary, unless the school district has a minimum career teacher salary that exceeds thirty thousand dollars.
- 2. It is the intent of the general assembly to establish and require the implementation of and provide for the implementation of the following additional career path levels:
 - a. Career II teacher.
 - (1) A career II teacher is a teacher who meets the requirements

of subsection 1, paragraph "b", has met the requirements established by the school district that employs the teacher, and is evaluated by the school district as demonstrating the competencies of a career II teacher. The teacher shall have successfully completed a performance review in order to be classified as a career II teacher.

- (2) It is the intent of the general assembly that the participating district shall establish a minimum salary for a career II teacher that is at least five thousand dollars greater than the minimum career teacher salary. It is further intended that the district shall adopt a plan that facilitates the transition of a career teacher to a career II level.
 - b. Advanced teacher.
- (1) An advanced teacher is a teacher who meets the following requirements:
- (a) Receives the recommendation of the review panel that the teacher possesses superior teaching skills and that the teacher should be classified as an advanced teacher.
- (b) Holds a valid license from the board of educational examiners.
- (c) Participates in teacher career development as outlined in this chapter and demonstrates continuous improvement in teaching.
- (d) Possesses the skills and qualifications to assume leadership roles.
- (2) It is the intent of the general assembly that the participating district shall establish a minimum salary for an advanced teacher that is at least thirteen thousand five hundred dollars greater than the minimum career teacher salary. In conjunction with the development of the review panel pursuant to section 284.9, the department shall make recommendations to the general assembly by January 1, 2002, regarding the appropriate district-to-district recognition for advanced teachers and methods that facilitate the transition of a teacher to the advanced level.
- 3. A teacher shall be promoted one level at a time and a teacher promoted to the next career level shall remain at that level for at least one year before requesting promotion to the next career level.
- 4. If a performance review for a teacher is conducted in the fifth year of the teacher's status at the career level, and indicates that the teacher's practice no longer meets the standards for that level, a performance review shall be conducted in the next following school year. If the performance review establishes that the teacher's practice fails to meet the standards for that level, the teacher shall be ineligible for any additional pay increase other than a cost-of-living increase.
- 5. A teacher employed in a participating district shall not receive less compensation in that participating district than the teacher received in the school year preceding participation, as set forth in section 284.4 due to implementation of this chapter. A teacher who achieves national board for professional teaching standards certification and meets the requirements of section 256.44 shall continue to receive the award as specified in section 256.44 in addition to the compensation set forth in this section.

- 6. a. If the licensed employees of a school district or area education agency receiving funds pursuant to section 284.13, subsection 1, paragraph "d" or "e", for purposes of this section, are organized under chapter 20 for collective bargaining purposes, the board of directors and the certified bargaining representative for the licensed employees shall mutually agree upon a formula for distributing the funds among the teachers employed by the school district or area education agency. However, the school district must comply with the salary minimums provided for in this section. The parties shall follow the negotiation and bargaining procedures specified in chapter 20 except that if the parties reach an impasse, neither impasse procedures agreed to by the parties nor sections 20.20 through 20.22 shall apply and the funds shall be paid as provided in paragraph "b". Negotiations under this section are subject to the scope of negotiations specified in section 20.9. If a board of directors and the certified bargaining representative for licensed employees have not reached mutual agreement for the distribution of funds received pursuant to section 284.13, subsection 1, paragraph "d" or "e", by July 15 of the fiscal year for which the funds are distributed, paragraph "b" of this subsection shall apply.
- b. If, once the minimum salary requirements of this section have been met by the school district or area education agency, and the school district or area education agency receiving funds pursuant to section 284.13, subsection 1, paragraph "d" or "e", for purposes of this section, and the certified bargaining representative for the licensed employees have not reached an agreement for distribution of the funds remaining, in accordance with paragraph "a", the board of directors shall divide the funds remaining among full-time teachers employed by the district or area education agency whose regular compensation is equal to or greater than the minimum career teacher salary specified in this section. The payment amount for teachers employed on less than a full-time basis shall be prorated.
- c. If the licensed employees of a school district or area education agency are not organized for collective bargaining purposes, the board of directors shall determine the method of distribution of such funds.

2001 Acts, ch 161, §8; 2001 Acts, ch 177, §5, 6, 15; 2002 Acts, ch 1152, §15, 16; 2003 Acts, ch 180, §43--46
Referred to in § 284.2, 284.8, 284.13

Minimum teacher salary requirements for the fiscal year beginning July 1, 2005, and ending June 30, 2006; 2005 Acts, ch 169, §10 284.8 PERFORMANCE REVIEW REQUIREMENTS FOR TEACHERS.

1. A participating school district shall review a teacher's performance at least once every three years for purposes of assisting teachers in making continuous improvement, documenting continued competence in the Iowa teaching standards, identifying teachers in need of improvement, or to determine whether the teacher's practice meets school district expectations for career advancement in accordance with section 284.7. The review shall include, at minimum, classroom observation of the teacher, the teacher's progress, and implementation of the teacher's individual career development plan;

shall include supporting documentation from other evaluators, teachers, parents, and students; and may include video portfolios as evidence of teaching practices.

- 2. If a supervisor or an evaluator determines, at any time, as a result of a teacher's performance that the teacher is not meeting district expectations under the lowa teaching standards specified in section 284.3, subsection 1, paragraphs "a" through "g", the criteria for the lowa teaching standards developed by the department in accordance with section 256.9, subsection 50, and any other standards or criteria established in the collective bargaining agreement, the evaluator shall, at the direction of the teacher's supervisor, recommend to the district that the teacher participate in an intensive assistance program. The intensive assistance program and its implementation are not subject to negotiation or grievance procedures established pursuant to chapter 20. By July 1, 2005, all school districts must be prepared to offer an intensive assistance program.
- 3. If a teacher is denied advancement to the career II or advanced teacher level based upon a performance review, the teacher may appeal the decision to an adjudicator under the process established under section 279.17. However, the decision of the adjudicator is final.

2001 Acts, ch 161, §9; 2002 Acts, ch 1152, §17; 2003 Acts, ch 180, §47

284.9 REVIEW PANEL.

- 1. A career II teacher seeking to receive an advanced designation shall submit a portfolio of work evidence aligned with the lowa teaching standards to a review panel established in accordance with subsection 2. A majority of the evidence in the portfolio shall be classroom-based. The review panel shall evaluate the career II teacher's portfolio to determine whether the teacher demonstrates superior teaching skills and shall make a recommendation to the board of educational examiners whether or not the teacher shall receive an advanced designation. The standards for recommendation include, but are not limited to, meeting the lowa teaching standards at an advanced level.
- 2. The department shall establish up to five regional review panels consisting of five members per panel. Each panel shall include, at a minimum, a nationally board-certified teacher and a school district administrator. Panel members shall be appointed by the director and shall possess the knowledge necessary to determine the quality of the evidence submitted in an applicant's portfolio. Panel members shall serve staggered three-year terms and may be reappointed to a second term. The department shall provide support and evaluation training for panel members and convene panels as needed. Panel members shall be reimbursed for mileage expenses incurred while engaged in the performance of official duties and shall receive per diem compensation by the department.
- 3. To assure fairness and consistency in the evaluation process, the review panels may perform random audits of the comprehensive evaluations and performance reviews conducted by evaluators

throughout the state, and may randomly review how the evaluators are evaluating teachers based upon the lowa teaching standards.

4. A teacher who does not receive a recommendation from a review panel may appeal that denial to an administrative law judge located in the department of inspections and appeals. The state shall not be liable for a teacher's attorney fees, costs, or damages that may result from an appeal of a review panel's decision. The state board shall adopt rules to administer this section.

2001 Acts, ch 161, §10; 2001 Acts, ch 177, §7, 15; 2003 Acts, ch 180, §48

Referred to in § 284.7, 284.13

284.10 EVALUATOR TRAINING PROGRAM.

- 1. The department shall establish an evaluator training program to improve the skills of school district evaluators in making employment decisions, making recommendations for licensure, and moving teachers through a career path as established under this chapter. The department shall consult with persons representing teachers, national board-certified teachers, administrators, school boards, higher education institutions with approved practitioner and administrator preparation programs, and with persons from the private sector knowledgeable in employment evaluation and evaluator training in order to develop standards and requirements for the program. Evaluator training programs offered pursuant to this chapter may be provided by a public or private entity. The department shall distribute a list of evaluator training program providers to each school district.
- 2. An administrator licensed under chapter 272 who conducts evaluations of teachers for purposes of this chapter shall complete the evaluator training program. A practitioner licensed under chapter 272 who is not an administrator may enroll in the evaluator training program. Enrollment preference shall be given to administrators. Upon successful completion, the provider shall certify that the administrator or other practitioner is qualified to conduct evaluations for employment, make recommendations for licensure, and make recommendations that a teacher is qualified to advance from one career path level to the next career path level pursuant to this chapter. Certification is for a period of five years and may be renewed.
- 3. A higher education institution approved by the state board to provide an administrator preparation program shall incorporate the evaluator training program into the program offered by the institution.
- 4. The board of educational examiners shall require certification as a condition of issuing or renewing an administrator's license.
- 5. By July 1, 2005, the director shall develop and implement an evaluator training certification renewal program for administrators and other practitioners who need to renew a certificate issued pursuant to this section.

2001 Acts, ch 161, §11, 25; 2001 Acts, ch 177, §8, 15; 2002 Acts, ch 1152, §18; 2003 Acts, ch 180, §49; 2004 Acts, ch 1175, §95 Referred to in § 284.2, 284.4, 284.13

Page 101

284.11 PILOT PROGRAM FOR TEAM-BASED VARIABLE PAY FOR STUDENT ACHIEVEMENT.

- 1. It is the intent of the general assembly to create a statewide team-based variable pay program to reward individual attendance centers for improvement in student achievement. A pilot program is established to give Iowa school districts with one or more participating attendance centers the opportunity to explore and demonstrate successful methods to implement team-based variable pay and to compare student achievement gains in school districts participating in the program with gains in school districts similar in nature that are not participating in the program. The department shall develop and administer the pilot program and shall provide technical assistance in the areas of goal setting and student assessments to school districts approved to participate in the pilot program. Preference shall be given to school districts that were previously approved to participate in a pilot program administered by the department in accordance with this section. Each school district approved by the department to participate in the pilot program shall administer valid and reliable standardized assessments at the beginning and end of the school year to demonstrate growth in student achievement.
- 2. All licensed practitioners employed at a participating attendance center that has demonstrated improvement in student achievement shall share in a cash award paid from moneys received by a school district pursuant to section 284.13, subsection 1. However, the school district is encouraged to extend cash awards to other staff employed at the attendance center.
- 3. The principal, with the participation of a team of licensed practitioners appointed by the principal, at each participating attendance center within a school district shall annually submit district attendance center student performance goals to the school board for approval. The attendance center goals must be aligned with the school improvement goals for the district developed in accordance with section 256.7, subsection 21. The district shall determine the designation of an attendance center for purposes of this section. The attendance center student performance goals may differ from attendance center to attendance center and may contain goals and indicators in addition to the comprehensive school improvement plan. An attendance center shall demonstrate student achievement through the use of multiple measures that are valid and reliable.
- 4. Each participating district shall create its own design for a team-based variable pay plan linked to the district's comprehensive school improvement plan. The plan must include attendance center student performance goals, student performance levels, multiple indicators to determine progress toward attendance center goals, and a system for providing financial rewards. The team-based variable pay plan shall be approved by the local board.
- 5. Each district team-based variable pay plan shall be reviewed by the department. The department shall include a review of the locally established goals, targeted levels of improvement, assessment strategies, and financial reward system.

- 6. A district electing to initiate a team-based variable pay plan according to this section during the school year beginning July 1, 2003, shall notify the department of its election in writing no later than August 1, 2003. The department shall certify the school district plan by October 1, 2003.
- 7. The district team-based variable pay plan shall specify how the funding received by the district for purposes of this section is to be awarded to eligible staff in attendance centers that meet or exceed their goals. The district shall provide all attendance centers equal access to the available funds. Moneys shall be released by the department to the district only upon certification by the school board that an attendance center has met or exceeded its goals.
- 8. Moneys received for purposes of this section shall not be used for payment of any collective bargaining agreement or arbitrator's decision negotiated or awarded under chapter 20.

2001 Acts, ch 161, §12; 2001 Acts, ch 177, §9, 10, 15; 2003 Acts, ch 44, §58; 2003 Acts, ch 108, §50; 2003 Acts, ch 180, §50 284.12 REPORTS -- RULES.

- 1. The department shall annually report the statewide progress on the following:
- a. Student achievement scores in mathematics and reading at the fourth and eighth grade levels on a district-by-district basis as reported to the local communities pursuant to section 256.7, subsection 21, paragraph "c".
 - b. Evaluator training program.
 - c. Team-based variable pay for student achievement.
- d. Changes and improvements in the evaluation of teachers under the lowa teaching standards.
- 2. The report shall be made available to the chairpersons and ranking members of the senate and house committees on education, the deans of the colleges of education at approved practitioner preparation institutions in this state, the state board, the governor, and school districts by January 1. School districts shall provide information as required by the department for the compilation of the report and for accounting and auditing purposes.
- 3. Subject to an appropriation of sufficient funds by the general assembly, the department shall provide for a comprehensive independent evaluation of all components of the student achievement and teacher quality program and shall submit the results of the evaluation in the report submitted pursuant to subsection 2 by January 1, 2007.
- 4. In developing administrative rules for consideration by the state board, the department shall consult with persons representing teachers, administrators, school boards, approved practitioner preparation institutions, and other appropriate education stakeholders.

2001 Acts, ch 161, §13; 2001 Acts, ch 177, §11, 15; 2003 Acts, ch 45, §1; 2005 Acts, ch 19, §39

284.13 STATE PROGRAM ALLOCATION.

1. For each fiscal year in which moneys are appropriated by the

- general assembly for purposes of the student achievement and teacher quality program, the moneys shall be allocated as follows in the following priority order:
- a. For the fiscal year beginning July 1, 2005, and ending June 30, 2006, to the department of education, the amount of two million dollars for the issuance of national board certification awards in accordance with section 256.44.
- b. For the fiscal year beginning July 1, 2005, and succeeding fiscal years, an amount up to four million two hundred thousand dollars for first-year and second-year beginning teachers, to the department of education for distribution to school districts for purposes of the beginning teacher mentoring and induction programs. A school district shall receive one thousand three hundred dollars per beginning teacher participating in the program. If the funds appropriated for the program are insufficient to pay mentors and school districts as provided in this paragraph, the department shall prorate the amount distributed to school districts based upon the amount appropriated. Moneys received by a school district pursuant to this paragraph shall be expended to provide each mentor with an award of five hundred dollars per semester, at a minimum, for participation in the school district's beginning teacher mentoring and induction program; to implement the plan; and to pay any applicable costs of the employer's share of contributions to federal social security and the lowa public employees' retirement system or a pension and annuity retirement system established under chapter 294. for such amounts paid by the district.
- c. For the fiscal year beginning July 1, 2005, and ending June 30, 2006, up to four hundred eighty-five thousand dollars to the department of education for purposes of implementing the career development program requirements of section 284.6, the review panel requirements of section 284.9, and the evaluator training program in section 284.10. From the moneys allocated to the department pursuant to this paragraph, not less than ten thousand dollars shall be distributed to the board of educational examiners for purposes of convening an educator licensing review working group. From the moneys allocated to the department pursuant to this paragraph, not less than eighty-five thousand dollars shall be used to administer the ambassador to education position in accordance with section 256.45. A portion of the funds allocated to the department for purposes of this paragraph may be used by the department for administrative purposes. Notwithstanding section 8.33, moneys allocated for purposes of this paragraph prior to July 1, 2004, which remain unobligated or unexpended at the end of the fiscal year for which the moneys were appropriated, shall remain available for expenditure for the purposes for which they were allocated, for the fiscal year beginning July 1, 2004, and ending June 30, 2005.
- d. For each fiscal year in which funds are appropriated for purposes of this chapter, the moneys remaining after distribution as provided in paragraphs "a" through "c" and "e" shall be allocated to school districts for salaries and career development in accordance with the following formula:

- (1) Fifty percent of the allocation shall be in the proportion that the basic enrollment of a school district bears to the sum of the basic enrollments of all school districts in the state for the budget year.
- (2) Fifty percent of the allocation shall be based upon the proportion that the number of full-time equivalent teachers employed by a school district bears to the sum of the number of full-time equivalent teachers who are employed by all school districts in the state for the base year.
- e. From moneys available under paragraph "d", the department shall allocate to area education agencies an amount per classroom teacher employed by an area education agency that is approximately equivalent to the average per teacher amount allocated to the districts. The average per teacher amount shall be calculated by dividing the total number of classroom teachers employed by school districts and the classroom teachers employed by area education agencies into the total amount of moneys available under paragraph "d".
- f. For the fiscal year beginning July 1, 2005, and ending June 30, 2006, up to ten million dollars to the department of education for use by school districts to add one additional teacher contract day to the school calendar. The department shall distribute funds allocated for the purpose of this paragraph based on the average per diem contract salary for each district as reported to the department for the school year beginning July 1, 2004, multiplied by the total number of full-time equivalent teachers in the base year. The department shall adjust each district's average per diem salary by the allowable growth rate established under section 257.8 for the fiscal year beginning July 1, 2005. The contract salary amount shall be the amount paid for their regular responsibilities but shall not include pay for extracurricular activities. A school district shall submit a report to the department in a manner determined by the department describing its use of the funds received under this paragraph. The department shall submit a report on school district use of the moneys distributed pursuant to this paragraph to the chairpersons and ranking members of the house and senate standing committees on education, the joint appropriations subcommittee on education, and the legislative services agency not later than January 15, 2006.
- g. For the fiscal year beginning July 1, 2005, and ending June 30, 2006, up to six million six hundred twenty-five thousand dollars to the department of education for use by school districts for either salaries or professional development, or both, as determined by the school district. Funds received by a school district for purposes of this paragraph shall be distributed using the formula provided in paragraph "d" and are subject to the provisions of section 284.7, subsection 6. A school district shall submit a report to the department in a manner determined by the department describing its use of the funds received under this paragraph. The department shall submit a report on school district use of the funds distributed pursuant to this paragraph to the chairpersons and ranking members of

the house and senate standing committees on education, the joint appropriations subcommittee on education, and the legislative services agency not later than January 15, 2006.

- h. Notwithstanding section 8.33, any moneys remaining unencumbered or unobligated from the moneys allocated for purposes of paragraph "a" or "b" shall not revert but shall remain available in the succeeding fiscal year for expenditure for the purposes designated. The provisions of section 8.39 shall not apply to the funds appropriated pursuant to this subsection.
- 2. A school district that is unable to meet the provisions of section 284.7, subsection 1, with funds allocated pursuant to subsection 1, paragraph "d", may request a waiver from the department to use funds appropriated under chapter 256D to meet the provisions of section 284.7, subsection 1, if the difference between the funds allocated to the school district pursuant to subsection 1, paragraph "d", and the amount required to comply with section 284.7, subsection 1, is not less than ten thousand dollars. The department shall consider the average class size of the school district, the school district's actual unspent balance from the preceding year, and the school district's current financial position.
- 3. Moneys received by a school district under this chapter are miscellaneous income for purposes of chapter 257 or are considered encumbered. A school district shall maintain a separate listing within its budget for payments received and expenditures made pursuant to this section.

2001 Acts, ch 177, §12, 15; 2002 Acts, ch 1152, §19, 20; 2003 Acts, ch 179, §116, 117; 2003 Acts, ch 182, §16, 17, 19, 20; 2004 Acts, ch 1175, §97, 98, 100; 2005 Acts, ch 169, §30--33 Referred to in § 284.5, 284.7, 284.11

